

KIRSTEN BOSCH  
GARDENING SERIES



GROW  
**SOUTH AFRICAN**  
PLANTS

Compiled by  
**Fiona Powrie**



NATIONAL  
*B*OTANICAL  
INSTITUTE

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Kirstenbosch Gardening Series

GROW  
**SOUTH AFRICAN**  
PLANTS



A GARDENERS' COMPANION TO INDIGENOUS PLANTS

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Biodiversity Institute

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## Foreword

The name Kirstenbosch has for many years been synonymous with the richness and beauty of South Africa's incredibly diverse flora. It has increasingly become associated with horticultural knowledge and expertise - the cumulative gardening wisdom of generations of talented horticulturists who have enjoyed the challenges of growing indigenous plants in this spectacular garden.

This comprehensive yet concise volume brings together the experience of dozens of dedicated specialists - much of the information being published for the first time. The volume contributes in an accessible way to the achievement of the mission of the National Botanical Institute which is to promote the sustainable use, conservation, appreciation and enjoyment of the exceptionally rich plant life of South Africa, for the benefit of all people.

Many South African plants are easy to propagate and to hybridise, as demonstrated by the magnificent displays of South African pelargoniums in the window boxes of Europe, the United States and beyond. The majority of our 22 000 species of indigenous plants are not easy to grow. Ongoing programmes of horticultural research and trialing will be necessary to ensure a steady flow of exciting new introductions to the industry

at home and abroad. The efforts of NBI horticulturists in our eight National Botanical Gardens is rapidly expanding our knowledge base, and the fact that this volume includes tips on 2 213 species - more than the entire indigenous flora of the United Kingdom - demonstrates the magnitude of the task accomplished, and the huge need for funds and human resources to complete our research on how to "Grow South African Plants".

The generous contributions made by volunteers and the general public to the study of our flora has been a source of continued encouragement to our professional team. The close collaboration between the staff of Kirstenbosch and the members of the Botanical Society of South Africa, is reflected in the success and popularity of the annual Kirstenbosch Plant Sale, the catalogues of which provide the foundation for this excellent volume.

Never before have South African plants enjoyed as much interest as today. This handbook will prove an invaluable reference for all those who wish to propagate and display our wonderful flora.

BRIAN J HUNTLEY  
Chief Executive,  
National Botanical Institute

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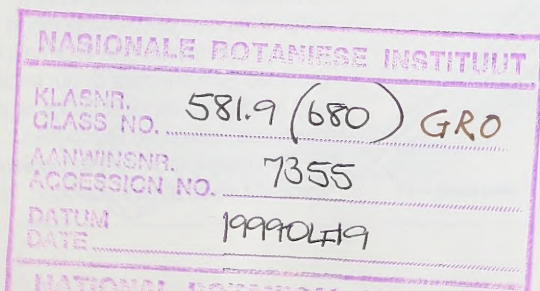
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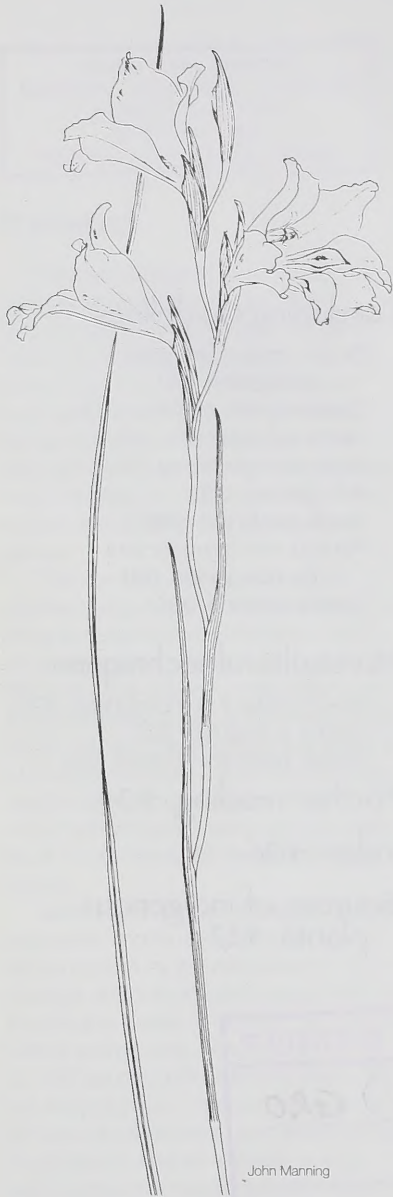
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## INTRODUCTION

The flora of southern Africa is vast with approximately 22 000 species. Less than a quarter of these are currently cultivated. Although some of these plants are well known around the world, for instance pelargoniums, osteospermum, gladiolus, aloes, proteas and ericas, many are not known. This vast and exciting flora offers gardeners many beautiful and interesting plants.

This book aims to introduce some of these plants, provide some basic information about them and offer some suggestions on how to use them. It has been compiled using all the existing catalogue records of the National Botanical Institute's (NBI) seed and plant sales. These descriptive records have been combined with the cultivation and propagation pamphlets that have been written by the Kirstenbosch staff over many years.

Many of the plants listed are fairly new to cultivation and have not been extensively trialed in a wide range of climatic conditions. The information provided is to the best of our knowledge, and feedback, especially with regard to hardiness, would be welcomed.

The contributors to this book are or were all based at Kirstenbosch, hence

John Manning

there is a strong bias towards the Western Cape, South Africa. This region has a typical Mediterranean climate with cool wet winters and hot dry summers.

The book is divided into three sections:

The first section consists of chapters divided according to plant group, with these groups arranged alphabetically. Each chapter consists of a set of descriptions arranged alphabetically and in most cases preceded by general cultivation information.

The second section consists of chapters relating to various types of gardens and lists of species that could be used in each type.

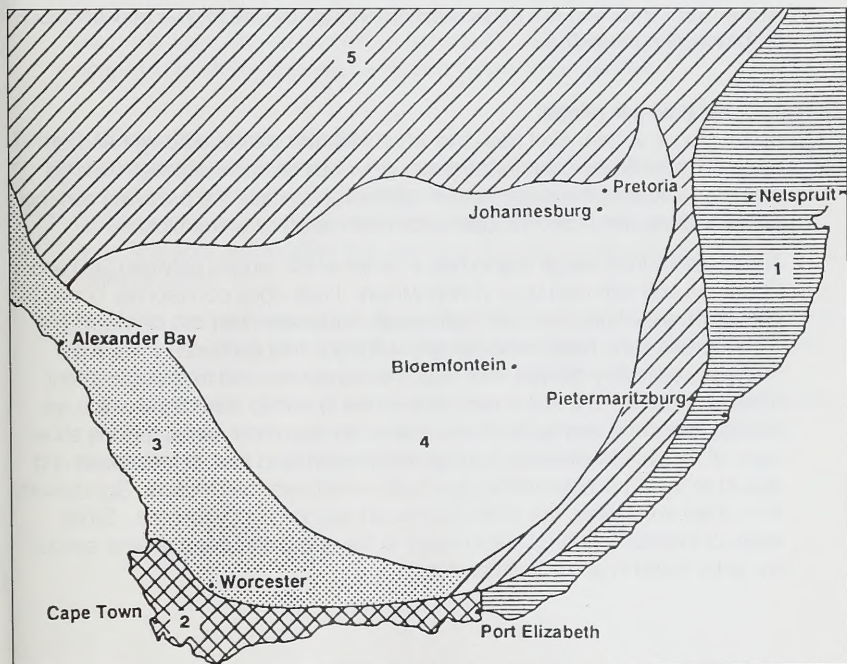
The third section provides notes on horticultural practices that are applicable to growing South African plants.

If you are trying to find the description for a particular plant, an alphabetical list of all species descriptions is provided. Here you can find in which plant group the species has been positioned (the species within the group are alphabetical).

If you require additional information or wish to source an illustration, a bibliography is included.

A list of South African nurseries where indigenous plants can be obtained in South Africa is provided.

## Planting zones for South Africa



These zones are a guide and exceptions do occur, e.g. isolated frost pockets in zone 1 and frost free areas in zones 4 and 5 do occur. By making good use of micro-climatic conditions within the garden, plants from different habitats can be grown. It is worth remembering though that the plants indigenous to your region are best adapted to grow there and need the least feeding and watering.

### Zone 1. Coastal summer rainfall



Characterized by the dry, frost-free winters, this area is influenced by the warm Indian Ocean. It includes the coastal towns of Natal and the Eastern Cape, as far south as Port Elizabeth. The southern part is subject to winter rainfall and has cooler conditions. The coastal city of Port Elizabeth and adjacent regions are also subject to strong winds which should be taken into account when selecting plant material.

The rainfall ranges between 700-1500 mm and falls during the warm summer months, resulting in muggy conditions. Frost does occasionally occur but in isolated pockets and with minimal damage. The river valleys towards the south are dry with valley bushveld vegetation. The soils are variable but fertile and range from loam to sandy loam, mainly derived from shale, quartzitic sandstone, granite, dolerite and rhyolite. Plants in this region grow rapidly because of the high rainfall and hot temperatures and thus require regular attention such as pruning and weeding.

### Zone 2. Coastal winter rainfall



This region is virtually frost free, and when frost occurs it is very light and of short duration. Many subtropical plants grow well here in warm well-watered positions. Close to the coast wind is stronger, especially the prevailing summer south-easterly winds and the gale force north-westerly winter storms.

The coastal winter rainfall region has a rainfall which ranges between 300 and 2000 mm and with cool days during winters. Frost does occasionally occur, especially away from the coast and usually not severe with little damage. The mountainous parts have colder winters with light frost and occasional snow. The soils are mainly derived from quartzitic sandstone and to a lesser extent shale and granite. The soil is derived from the quartzitic sandstone which are mineraly poor and very acidic; many plants from summer rainfall regions show signs of mineral deficiencies, such as Magnesium and Iron, in these soils and should receive a supplementary feed with a well balanced fertiliser. Soil derived from shale and granite are richer but should also be supplemented. Small areas of limestone derived soil to occur in the south and deep alkaline sands are to be found in some coastal areas.

### Zone 3. Winter rainfall Karoo



As the name implies, this region is subject to winter rainfall, however, summer rainfall is also experienced occasionally in the eastern parts. The soils are mainly a sandy loam derived from granite, shale or quartzitic sandstone, generally rich in minerals. Many subtropical plants grow well here provided that they are watered sufficiently and planted in areas where frost is light.

Rainfall ranges between 25 and 350 mm. Frost is absent from the northern and coastal regions of Namaqualand, but on the inland escarpment and mountainous portion frost is experienced during or after cold fronts.

### Zone 4 Summer rainfall Karoo / Highveld



Situated on the 'great escarpment', frost in winter is severe, which drastically limits plant choice out of doors. Nevertheless there is a wide choice of frost-resistant plants which can be used very effectively. Rainfall is mainly in summer with dry winters but in the north-western area the rainfall is very low which should also be taken into account when selecting plant material. It is important to note that though plants from this region are adapted to survive cold conditions, this is a dry cold.

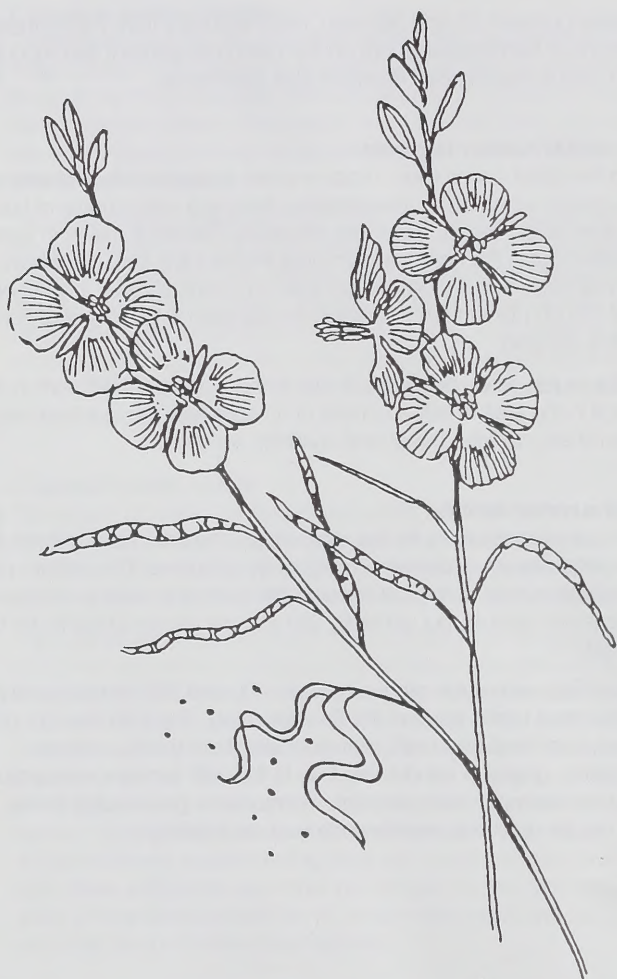
Rainfall in the region varies between 75 mm in the west to a 1000 mm in the east. The soil in the area is fertile, consist of a sandy loam or clay-loam mainly derived from shale, dolerite, basalt and quartzitic sandstone.

### Zone 5. Bushveld summer rainfall



This region is characterised by its dry, mild winters, however frost may be a problem in certain areas, especially the higher lying regions. The eastern part receives a fair amount of rainfall but towards the north and west it becomes drier. The soils are variable, but generally rich and the choice of plants for this region is great.

Rainfall in the bushveld region ranges between 400 and 800 mm per annum in summer. The driest part is north of the Zoutpansberg. The soils are rich, consists of sandy-loam and clay-loam, derived mainly from rhyolite, dolerite, dolomite, granite, gneiss or sandstone. Due to the high summer temperatures care should be taken with new plantings. Some plants grow rapidly in this region and require additional maintenance such as pruning.





Jeanette Loedolff

## GROWING ANNUALS

An annual is a plant which completes its life cycle in one year. In other words, seeds germinate and grow into adult plants which flower, produce seed and then die, all in one growing season of about seven months. In this way the unfavourable time of the year, the hot dry summer or the cold dry winter, is survived safely in the form of seed.

### Spring Annuals

Every year in Spring we have a annual display like no where else in the world. All along the west coast from Alexander Bay to Cape Town wild displays of pure magic. Fields of annuals cover the ground in a spectacular range of colour from brilliant white, soft peach, intense orange and yellow to striking blue and mauve. It is mostly the daisies like *Dimorphotheca*, *Arctotis*, *Felicia*, *Osteospermum* and *Gazania* which creates the sheets of flowing colour. When looking closer many other annuals like *Diascia*, *Nemesia*, *Heliophila*, *Wahlenbergia* and *Grielem* can be identified.

Many of these annuals grow well in ordinary gardens. The main time for sowing is in autumn (March-April) which is the start of the rainy season in

Namaqualand. The seeds can be sown directly in a prepared flower bed or in seedbeds and trays, from which it gets planted out into the garden. Most of the annuals need a light soil with good drainage and full sun. In areas with very cold winters it is best to only plant the annuals out in spring as they cannot take freezing temperatures.

**Summer Annuals**

In summer there are the beautiful the wild foxgloves (*Ceratotheca*), Stinkkruid (*Oncosiphon*) and some arctotis for colour. These annuals make beautiful combinations with perennials like *Anchusa* and *Wahlenbergia*.

Summer annuals are sown in spring (August/September) in seed trays, seed beds or directly in the garden beds, though weeds can be a problem in the latter case. One to two months later the seedlings are then ready to be planted out from seed trays or beds into the garden. A light, well drained soil and full sun is important.

**Seed sowing**

Seed may merely be pressed into sandy soil or a light sprinkling of soil - just enough to cover the seed - is usually

enough for all small seed. It is specially advisable for fluffy, feather-weight seed, such as *Arctotis* and *Ursinia*, to press it firmly into the surface of the soil and cover to prevent it blowing away. If the sowing is done in very dry weather, the ground should be well-watered beforehand and kept reasonably damp. Do not sow seeds thickly. In the case of the plants with the tiny seed mixing the seed with a little dry sand helps sowing. Some species, however, seem to thrive even under crowded conditions, and thinning out can always be resorted to during the growing stage.

**Garden use**

For an effective display, annuals should be mass planted or mixed with fast growing herbaceous plant. After flowering, the plants may be left until the seed has ripened before they are removed to make way for the summer annuals. The seed collected in the garden may then be used for the following year's spring annuals.

Southern African annuals are primarily lovers of the sun and therefore need to be grown in open situations with full day sun. The soil should be well-drained, light and friable.

**Annuals**

**Aeollanthus suaveolens**

Jaarsalie

Lamiaceae

A soft almost succulent annual with aromatic purple-green leaves and small pink flowers in autumn.

300 mm

**Arctotis fastuosa**

Bittergousblom

Asteraceae

An annual for summer or spring display with large orange daisies and soft hairy leaves. Sow in autumn for spring display and spring for summer display.

600mm

**Arctotis hirsuta**

Gousblom

A spring annual with orange or cream daisy flowers  
mm and soft hairy leaves. Sow the seed in autumn.

Asteraceae

±500

**Arctotis venusta**

Witgousblom

White daisies tinted with mauve, summer flowering,  
sow in spring.

Asteraceae

600 mm

**Ceratotheca triloba**

Wild foxglove

This is an elegant tall growing summer annual with  
pendulous white or mauve foxglove-like flowers. Sow  
seed in early spring in a warm position, plant in full  
sun.

Pedaliaceae

2m

**Dimorphotheca pluvialis**

White Namaqualand daisy

A flat growing annual with brilliant white flowers in  
spring. Easy to grow from seed which must be  
sown in autumn.

Asteraceae

300mm

**Dimorphotheca sinuata**

Namaqualand daisy

A spring annual with bright orange daisy flowers.  
Easy to grow from seed sown in autumn.

Asteraceae

400 mm

**Dorotheanthus bellidiformis**

Bokbaai vygie, Livingstone daisy

A succulent annual with small glistening leaves and  
mm masses of brilliant flowers in a range of colours.  
Sow the fine seed in autumn.

Mesemb.

25 - 100

**Dorotheanthus gramineus**

Narrow-leaved Bokbaai vygie, Smalblaar-bokbaai vygie  
Annual, spreading, brilliant deep pink flowers, upright  
narrow succulent leaves, long flowering period, easy  
to grow.

Mesemb.

20 - 100mm

**Felicia dubia**

Dwarf felicia

A small dainty annual with bright blue daisies with  
yellow centres, spring flowering, sow autumn.

Asteraceae

150 mm

**Felicia heterophylla**

A striking spring annual. The blue daisy flowers have  
dark blue centres. Sow in autumn.

Asteraceae

200 - 300 mm

<b>Heliophila coronopifolia</b>	Brassicaceae
Blue flax	
Fine herbaceous annual, flowers sky-blue, spring, sow autumn, very showy on its own or mixed with other annuals.	600 mm
<b>Nemesia strumosa</b>	Scrophulariaceae
Nemesia, Leeubekkie	
A beautiful spring annual with large orange, white or pink flowers, sow autumn.	300 - 500 mm
<b>Nemesia versicolor</b>	Scrophulariaceae
Weeskindertjies	
Erect annual, blue and white flowers, long spring flowering period, sow in autumn.	150- 300 mm
<b>Papaver aculeatum</b>	Papaveraceae
Wild poppy, Koringroos	
Orange flowers in summer, sow spring or autumn.	700mm
<b>Pentzia grandiflora</b>	Asteraceae
Stinkkruid	
A spring or summer annual with aromatic lacy flowers . and bright yellow button-like flowerheads. Sow in autumn for spring display and spring for summer display.	4 - 1 m
<b>Pentzia suffruticosa</b>	Asteraceae
Stinkkruidbossie	
Small yellow button daisies, sow in spring for summer display.	300 mm
<b>Senecio elegans</b>	Asteraceae
Wild cineraria, Strandblommetjie.	
Annual with attractive purple or white daisy flowers with yellow centres, occasionally double, in spring. Wind-tolerant, suitable for coastal gardens, grows in full sun to semi-shade. Sow in autumn.	0.3 - 1 m
<b>Steirodiscus tetragynus</b>	Asteraceae
Rounded bush, very attractive, yellow daisy flowers, long flowering period in spring, sow in autumn.	200 mm
<b>Ursinia anthemoides</b>	Asteraceae
Marigold, Bergmagriet	
Handsome annual daisy, ray florets yellow with black or dark yellow blotches at base, delicate lacy foliage, spring flowering, sow autumn.	300 mm

**Ursinia cakilefolia**

Attractive orange or lemon yellow daisy flowers in spring, delicate lacy foliage, sow in autumn.

Asteraceae  
450 mm

**Ursinia calenduliflora**

Daisies in shades of orange and yellow, delicate lacy foliage, spring-flowering, sow in autumn.

Asteraceae  
500 mm

**Ursinia nana**

A small spreading annual with fine foliage and soft yellow flowers. It tends to sow itself giving a year round display.

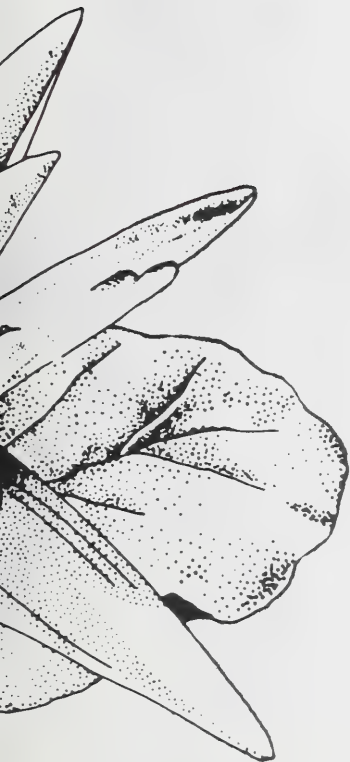
Asteraceae  
50 - 400 mm

**Ursinia speciosa**

Large daisies, orange or yellow sometimes white, finely divided leaves, spring flowering, sow in autumn.

**Asteraceae**  
100 - 400 mm





## GROWING AQUATICS

Aquatic plants, as their name implies, live in water, some as the reed like plants on the margin of ponds, others with floating leaves such as the water lilies and the submerged aquatics with a true aquatic life style.

Plants are essential in ponds that have other life forms such as fish. They purify the water and act as filters, as well as protecting the fish from predators.

Bull-rushes (*Typha capensis*) and papyrus reeds (*Cyperus papyrus*) are marginal aquatics. They have a rapid growth nature and care should be taken that they do not fill the whole pond or wetland.

The submerged aquatics and floating plants also provide protection and provide oxygen to fish. The water lily (*Nymphaea nouchali* var. *caerulea*) and waterblommetjie (*Aponogeton distachyos*) are attractive plants. They can be planted in containers submerged in the water or in a gravel bed.

Submerged water-weeds are an important part of an aquatic system. These provide oxygen to the water and all others aquatics, in addition they absorb minerals, nitrates and other harmful substances. Aquatics are easily propagated by division or seed.

## Aquatics

### **Aponogeton angustifolius**

Wateruintjie, Cape pond weed

Floating lanceolate leaves, white scentless  
flowers from June to August.

Aponogetonaceae

100 mm,

### **Aponogeton distachyos**

Waterblommetjie

Floating lanceolate leaves, white scented flowers  
from July to December.

Aponogetonaceae

### **Lobelia capillifolia**

Broom-like perennial, light blue flowers, September  
to May.

Campanulaceae

200 - 500 mm

### **Nymphaea nouchali var. caerulea**

Water lily, Waterlelie

Perennial, rounded floating leaves, showy blue  
flowers, mid to late summer, sow under about water,  
grow in humus rich soil in full sun in water.

Nymphaeaceae

25 mm up to 1m

### **Nymphoides indica**

Geelwateruintjie,

Small yellow water lily Perennial with floating leaves,  
yellow flowers during summer.

Menyanthaceae

100 mm





## GROWING BUCHUS

The term buchu, a Khoikhoi word for aromatic herb, is commonly used to describe our small-leaved indigenous shrubs that exude a pleasant fresh smell when touched, especially during wet weather.

The buchus belong to the economically important cosmopolitan family Rutaceae, which includes the citrus fruits. The genera included under the term buchu are *Acmadenia*, *Adenandra*, *Agathosma*, *Coleonema*, *Diosma*, *Empleurum*, *Euchaetis*, *Macrostylis*, *Phyllosma* and *Sheilantha*. The common characteristic is the presence of volatile oils in glands dotting the leaves and fruits. The commercially grown true buchus are *Agathosma crenulata* and *Agathosma betulina*. Oil is extracted for use in manufacturing cosmetics, soaps, food colourants and medicinally for the treatment of renal disorders and chest complaints.

Plants from the buchu group are an asset to any garden. They are small to medium shrubs with a neat compact appearance, providing colour in the winter with a proliferation of flowers ranging from white to pink and lilac and delightful aromatic foliage. The flowers are small (5 to 20 mm) with five petals

arranged in a star shape, and occur either singly or clustered together to resemble a small pompon.

## CULTIVATION

The main distribution range of the buchu is in the southern and south-western Cape. As minor members of the fynbos vegetation, they adhere to the fynbos fire-prone life span of between 10 to 15 years, becoming more woody as they age.

They perform best when planted in the full sun. The soil should be slightly acid, well drained, composted and enriched with a well balanced fertilizer. Plant out in groups of 3 to 5 with a spacing of 200 to 300 mm. Buchus respond to fairly dense planting which helps to retain soil moisture. An annual mulching of well rotted compost is advised to reduce weeds, keep soil temperatures lower and reduce loss of moisture. Buchus always occur naturally in a mixed fynbos and ideally should be used in this way in a garden with companions from plant groups such as restios, phylicas, pelargoniums, polygalas and helichrysums.

Young buchu plants should be pinched back to encourage bushy growth. Cultivating soil around the root area is not advised. Water requirements are moderate and when irrigating, aim to have the foliage dry by nightfall to discourage any fungal attack.

## Pests and diseases

The volatile oils, responsible for the aromatic and sometimes pungent smell, act as an antifeedant discouraging insect attack. The exception is the citrus caterpillar which can be controlled with a

contact stomach insecticide.

*Phytophthora cinnamomi*, a soil and water borne fungus, unfortunately attacks many fynbos species. This fungus, whose activity is promoted by high soil temperatures, attacks the root system preventing the uptake of water thus causing the plant to wither rapidly and die.

## To reduce deaths:

- treat young plants with Furalaxyl (acylalanine) or Fongarid 25 WP just prior to planting out.
- take care to minimize root damage.
- use a soil mulch to reduce soil temperature.
- disturb the soil as little as possible.
- remove infected plants immediately.
- drench space with diluted Jeyes Fluid. This is not a cure-all, but a measure of control to protect adjacent planting.

## PROPAGATION

### Seed

The buchus produce their seed in a capsule from which it is expelled on ripening. This phenomenon is known as ballistic dispersal. To harvest the seed, wait for the first few capsules to open and then collect the plump darker capsules. Place in a closed paper bag or lidded box (not plastic). Store in a warm dry place and the seed will be expelled - in fact you will hear it happen.

Sowing is usually done in April. Prepare a well drained medium using sand, loam and compost in equal proportions. The mix should be light. Place medium in 100 mm deep trays with adequate drainage holes, level and

firm the surface and water well. Sow seed evenly and cover with approximately 3 mm of medium. Apply a smoke treatment (see page ) which will greatly enhance germination. Place in a covered area with good light and air circulation. Keep damp. Over-watering and poor drainage will cause bacterial infection. Germination occurs in 1 to 2 months.

Seedlings are pricked out into 0.5 l bags when 4 true leaves have developed, using a fynbos potting medium. Great care must be taken not to damage the fine root system. Harden the seedlings in a protected area for 3 weeks, then place in the sun. A regular application of a balanced liquid balanced nutrient is recommended. Pinch out the growing tips of the seedlings to encourage bushy growth. The plants need about 9 months development before planting out in the garden. Flowers are produced after 2 years.

**Vegetative propagation**

Cuttings have the advantage of producing a larger flowering plant quicker than seedlings. Semi-hardwood cuttings, 50 to

70 mm, are taken from the current year's growth. Suitable material is produced 6 to 9 weeks after flowering, usually from August to early October. Prepare cuttings by making a clean cut below a node and remove the lower third of the foliage. Dip cut ends in a rooting hormone such as Seradix 3. Firmly place cuttings in a medium of 50% bark and 50% polystyrene. Ideally these cutting trays should now be placed in a well aerated propagation unit with a bottom heat of 24 °C with intermittent misting.

However, a measure of success can be obtained by enclosing the cutting tray in transparent plastic to create a terrarium. Support the plastic to prevent any contact with the foliage and ensure the medium is always damp.

Rooting occurs in 9 to 11 weeks. Carefully pot the rooted cuttings into 0.5 l bags using a well drained humus-rich fynbos potting medium. Harden off in a protected area for 3 weeks before placing in the sun.

Plants will be ready for planting out in 7 to 8 months. Feed regularly with a well balanced nutrient. Yellowing leaves can be treated with an application of iron chelate.

**Buchus**

**Acmadenia alternifolia**

Small shrub with deep pink flowers in winter.

Rutaceae  
1m

**Acmadenia heterophylla**

Low spreading shrub, bright pink flowers in autumn, suitable for rockeries

Rutaceae  
400 mm

**Acmadenia mundiana**

Much branched, upright, evergreen shrub, attractive grey-green foliage, dusty pink, star shaped flowers in late winter - summer, full sun, well-drained humus enriched soils, grows in alkaline soil.

Rutaceae  
1m

<b>Acmadenia obtusata</b>	Rutaceae
A variable shrub with highly aromatic foliage and showy pink flowers.	0.5-1.5 m
<b>Adenandra fragrans</b>	Rutaceae
A small aromatic shrub with showy pink flowers in spring.	300mm
<b>Adenandra gummifera</b>	Rutaceae
Shrublet, flowers white with pink reverse, mid-summer through spring, sow autumn.	0.4 - 1 m
<b>Adenandra uniflora</b>	Rutaceae
China flower, Kommetjietewater, Bergskaapboegoe	
Shrublet, flowers white or pink, winter-early summer, sow autumn.	100 - 400 mm
<b>Agathosma apiculata</b>	Rutaceae
Knoffelboegoe	
Densely leafy strong smelling shrublet with white flowers in terminal clusters during winter, coastal dunes.	300 - 900 mm
<b>Agathosma betulina</b>	Rutaceae
Buchu, Bergboegoe	
A large multistemmed fragrant shrub with large white to pink flowers from June to November. Requires a warm well drained slope.	2 m
<b>Agathosma cerefolium</b>	Rutaceae
Anysboegoe, Strandboegoe	
An aniseed scented shrublet with terminal clusters of white, pink or mauve flowers in summer. A good coastal plant for alkaline soils.	500 - 600mm
<b>Agathosma ciliaris</b>	Rutaceae
Bergboegoe	
Dense rounded shrublet, aromatic foliage, flowers in clusters, white to lilac, in winter, sow autumn.	0.5-1 m
<b>Agathosma collina</b>	Rutaceae
A dense aromatic shrub with tight heads of yellow-green flowers in winter.	1.5 m
<b>Agathosma crenulata</b>	Rutaceae
Buchu	
A lovely rounded shrub with glossy dark green oval leaves that are very rich in oil glands.	0.5-2 m

Large white to pink flowers are borne in the axils of the leaves from June to November. Well drained soil and regular water required.	
<b>Agathosma dielsiana</b>	Rutaceae
Dense shrub with white or mauve flowers in winter.	250 mm
<b>Agathosma glabrata</b>	Rutaceae
Dense shrub with mauve to white flowers in spring.	400 mm
<b>Agathosma gonaquensis</b>	Rutaceae
Densely leafy shrub, white flowers in dense heads are found throughout the year.	1m
<b>Agathosma imbricata</b>	Rutaceae
Wildeboegoe	
Sharp fragrance, white flowers in spring, good hanging basket subject.	1 m
<b>Agathosma martiana</b>	Rutaceae
Shrub, white flowers in terminal clusters, spring, sow in 600mm autumn.	
<b>Agathosma mucronulata</b>	Rutaceae
Evergreen shrub, pungent smelling foliage, small star-shaped white flowers from September to October, well-drained humus-rich soil in full sun.	1 m
<b>Agathosma ovata</b>	Rutaceae
False buchu, Basterboegoe	
Compact, evergreen low growing shrub, aromatic leaves, small white star-shaped flowers, 8 mm, in late winter to spring.	0.3 - 1 m
<b>Agathosma ovata ‘Bloukrans’</b>	Rutaceae
Upright aromatic shrub with pale pink flowers in late winter.	1 - 1.5 m
<b>Agathosma ovata ‘Glentana’</b>	Rutaceae
Neat, upright, evergreen shrub, medium to fast growing in full sun, pale pink flowers late winter to spring.	1 - 1.5 m
<b>Agathosma ovata ‘Igoda’</b>	Rutaceae
Evergreen compact shrub, finely textured foliage, pink flowers from June to September, well-drained humus-rich soil in full sun.	700 mm
<b>Agathosma ovata ‘Kluitjieskraal’</b>	Rutaceae
False buchu.	
A rounded, branching, evergreen shrublet with small	0.4-0.6m

aromatic leaves. Produces dense clusters of pink, star-shaped flowers, which cover the plant from mid to late winter. Spectacular in mixed borders, fynbos beds, pots and mass planted.	
<b>Agathosma ovata ‘Outeniqua’</b>	Rutaceae
Upright, evergreen shrub, white flowers June to September, full sun or in shade, grows taller in shade.	2 m.
<b>Agathosma ovata ‘Witteklip’</b>	Rutaceae
A compact aromatic shrub with white flowers.	500 mm
<b>Agathosma scaberula</b>	Rutaceae
Stout rounded shrub, flowers in dense terminal clusters, white, sandy flats.	400 mm
<b>Agathosma serpyllacea</b>	Rutaceae
Variable low shrub, flowers pink to mauve.	0.5-1 m
<b>Agathosma serpyllacea ‘San Sebastian’</b>	Rutaceae
A low compact shrub with mauve flowers in dense terminal clusters.	700 mm
<b>Coleonema album</b>	Rutaceae
Cape may, Aasbossie.	
Evergreen shrub with fine aromatic foliage and numerous white flowers from May to November, suitable for bonsai or containers or as a general garden subject, recommended. Full sun.	1 - 3 m
<b>Coleonema aspalathoides</b>	Rutaceae
Confetti bush	
Small leafed shrub, aromatic, bright pink flowers, autumn to spring, suitable for a fynbos garden or container plant, becomes more compact with light pruning.	600-900mm
<b>Coleonema calycinum</b>	Rutaceae
Fine aromatic, evergreen upright shrub, masses of small white flowers, June to September, full sun to semi-shade, fast growing.	1-1.5m
<b>Coleonema pulchellum</b>	Rutaceae
Neat evergreen shrub with feathery aromatic foliage, covered with miniature pink-white starry flowers, winter to spring, hardy, container plant, low hedge, or bonsai subject.	1 m

**Diosma acmaeophylla**

Cream flowers in autumn, dry mountain slopes.

Rutaceae

2.5 m

**Diosma haelkraalensis**

Low spreading shrub, white flowers in late summer,  
sow in autumn.

Rutaceae

100-300mm

**Euchaetis meridionalis**

Compact shrub; flowers pinkish in autumn - summer;  
sow in autumn; occurs on coastal limestone slopes.

Rutaceae

1.5m





Jeanette Loedolff

## GROWING BULBS

South Africa, and in particular the winter rainfall region of the Cape, possesses an incredible wealth of indigenous bulbous flora, of which a substantial number of species are eminently suited to cultivation.

The popular term 'bulbous' usually refers to plants of a geophytic nature, i.e. plants which perennate (survive through unfavourable times) by subterranean buds. These include true bulbs (e.g. *Galtonia*, *Lachenalia*), corms (e.g. *Gladiolus*, *Watsonia*), tuberous rootstocks (e.g. *Bulbine*, *Zantedeschia*) and rhizomatous rootstocks (e.g. *Clivia*, *Kniphofia*). Geophytic members of the families Orchidaceae and Geraniaceae are not covered in this pamphlet as their cultivation requirements are somewhat different.

The South African bulbous flora can be conveniently placed into three groups: evergreen species, summer-growing species and winter-growing species. The largest number of bulbous species are found in the winter-growing group.

It should be borne in mind that a number of genera require rather specialized cultivation techniques (e.g. *Cyrtanthus*, *Gethyllis*) but the notes contained in this chapter are aimed at

providing the grower with a general guide to cultivation of our indigenous bulbous plants.

For a more detailed exposition, the reader is referred to *Bulbous Plants of Southern Africa*, a guide to their cultivation and propagation, by Niel du Plessis and Graham Duncan, with watercolours by Elise Bodley (Tafelberg, 1989).

## EVERGREEN SPECIES

The evergreen species occur naturally in both the winter and summer rainfall areas, but a substantial number are to be found in areas of year-round rainfall, such as the southern Cape, and in subtropical, coastal areas such as in Natal. Evergreen species also undergo a short dormant period at some stage in the year while maintaining their older leaves, and generally produce additional new foliage in spring and summer. The very wide-ranging habitats of evergreen species (from deep shade to full sun) make them invaluable to the gardener, both as container and garden subjects.

### Container subjects

#### *Aspect and growing medium*

Most evergreen species suitable for containers require a partially shaded position (e.g. *Albuca nelsonii*, *Haemanthus albiflos* and *Tulbaghia simmleri*) while others definitely need full sun (e.g. *Aristea spiralis*) and others need full shade (e.g. *Scadoxus membranaceus*); it is important to know the growth habits of the species in the wild in order to cultivate them successfully. Evergreen species in containers are very decorative when grouped together in large pots on a

steep or balcony, and they generally prefer a rich, well-drained medium. A 35 cm pot is the most convenient one in which to grow the larger species such as *Clivia miniata* and *Cyrtanthus herrei*, while 25 cm and 30 cm pots are suitable for the smaller *Cyrtanthus* and *Nerine* species. The smaller evergreen *Cyrtanthus* species are also grown to great advantage in 25 cm. hanging baskets (e.g. *C. sanguineus* and *C. montanus*).

#### *Planting and watering*

Planting-up new pots of evergreen species can be done immediately after the flowering period, and generally they should remain undisturbed for several years. Certain evergreen *Cyrtanthus* species such as *C. montanus* and *C. herrei* require infrequent watering, but for most evergreen container subjects, a good soaking once a week is recommended.

## SOME PARTICULARLY DESIRABLE EVERGREEN SPECIES FOR CONTAINER CULTIVATION

*Agapanthus comptonii*  
*Albuca nelsonii*  
*Clivia caulescens*  
*Clivia miniata*  
*Cyrtanthus brachyscyphus*  
*Cyrtanthus elatus* (= *purpureus*)  
*Cyrtanthus epiphyticus*  
*Cyrtanthus eucallus*  
*Cyrtanthus herrei*  
*Cyrtanthus mackenii*  
*Cyrtanthus montanus*  
*Cyrtanthus obliquus*  
*Cyrtanthus sanguineus*  
*Cyrtanthus spiralis*

*Cyrtanthus staadensis*  
*Dilatis ixioides*  
*Dilatis viscosa*  
*Haemanthus albiflos*  
*Nerine filifolia*  
*Nerine masonorum*  
*Nerine undulata*  
*Tulbaghia simmleri*  
*Tulbaghia violacea*  
*Veltheimia bracteata*

## Garden subjects

### Aspect and growing medium

Evergreen species in the garden can remain in the same position for many years; several prefer a full sun situation (such as *Kniphofia*, *Watsonia* and *Dietes* species) but others flourish in full or semi-shade (*Clivia miniata* and *Scadoxus membranaceus*). A number of sun-loving species such as *Agapanthus praecox* and *Dietes grandiflora* will also flourish in full shade, but will then flower infrequently, if at all. In general, a very rich, well-drained growing medium is required for most species.

### Planting and watering

Planting out evergreen species in the garden after lifting and dividing is best done straight after flowering. New plantings should be kept constantly moist until established. If natural precipitation is lacking, a good soaking every one to two weeks is recommended for established plants.

## SOME PARTICULARLY DESIRABLE EVERGREEN SPECIES FOR GARDENS

*Agapanthus comptonii*  
*Agapanthus praecox*  
*Albuca nelsonii*

*Aristea ecklonii*  
*Aristea major*  
*Clivia miniata*  
*Cyrtanthus brachyscyphus*  
*Cyrtanthus elatus*  
*Cyrtanthus mackenii*  
*Dierama pendulum*  
*Dierama pulcherrimum*  
*Dierama robustum*  
*Dietes bicolor*  
*Dietes grandiflora*  
*Dilatis ixioides*  
*Dilatis viscosa*  
*Kniphofia laxiflora*  
*Kniphofia linearifolia*  
*Kniphofia praecox*  
*Kniphofia rooperi*  
*Kniphofia uvaria*  
*Moraea huttonii*  
*Moraea spathulata*  
*Nerine filifolia*  
*Scadoxus membranaceus*  
*Tulbaghia simmleri*  
*Tulbaghia violacea*  
*Veltheimia bracteata*  
*Wachendorfia thyrsiflora*  
*Watsonia angusta*  
*Watsonia fourcadei*  
*Watsonia pillansii*  
*Watsonia tabularis*

## SUMMER-GROWING SPECIES

The summer-growing species occur naturally in the former Transvaal, KwaZulu-Natal, Free State, Great Karoo and from the Northern to the Eastern Cape. Their growth cycle is generally characterized by the production of new vegetative growth in spring, followed by rapid growth in summer with flowering from mid-summer to late autumn, followed by a dormant period in winter.

Many members of the family Amaryllidaceae (e.g. *Boophane disticha*) however, produce flowers at the beginning of the growing season.

### Container subjects

Container cultivation is the only practical way to grow many of the more delicate of our summer-growing species, for example, *Cyrtanthus* and *Nerine*. In general, however, most summer-growing species are robust and best suited to garden culture.

#### Aspect

A partially shaded position with free air circulation is required for most species. In areas with heavy summer rainfall, the more delicate species are best grown under cover; this also applies to areas with winter rainfall as the containers can easily be stored dry during the winter dormant period.

#### Growing medium

As with the winter-growing species, the most important component of the growing medium is a medium-grained, washed river or industrial sand used in varying proportions with fine compost, depending on the species. For easily cultivated species such as *Cyrtanthus falcatus* and *Haemanthus montanus*, a medium consisting of two-parts river or industrial sand and one-part fine compost is recommended. Less easily cultivated species such as *Cyrtanthus loddigesianus* and *Crinum nerinoides* should have a reduced proportion of compost, while difficult species such as *Cyrtanthus helictus* and *Gladiolus cruentus* should be grown in a medium of equal parts river and industrial sand.

As with the winter-growing species, deep, brown plastic pots are ideal; a 20 cm pot is suitable for the smaller species of *Cyrtanthus* and *Nerine* while a 25 cm pot is suitable for larger members of these genera, as well as the dwarf *Eucomis* species. A 30 cm pot is needed for robust species such as *Nerine bowdenii*, *Gladiolus saundersii* and *Tritonia disticha*, while a 35 cm pot is required for very large species such as *Boophane disticha*, *Gladiolus ochroleucus* and *Scadoxus multiflorus*.

#### Planting

The general rule of a depth of about three times the height of the rootstock applies to most members of the Iridaceae but members of the Amaryllidaceae and Liliaceae are usually planted much nearer the surface, or with their necks protruding above ground level (e.g. *Cyrtanthus falcatus*). At least two-thirds of the bulb of *Boophane disticha* and *Lindneria clavata*, for example, is planted above ground level.

The summer-growers are planted out in spring, but members of the Amaryllidaceae, once planted, should remain undisturbed for many years.

#### Watering

A good soaking once a week is recommended for most of the summer-growers in containers, but many members of the genus *Cyrtanthus* require far less frequent watering, say once every three weeks for species such as *C. smithiae* and *C. clavatus*.

## SOME PARTICULARLY DESIRABLE SUMMER-GROWING SPECIES FOR CONTAINERS

*Ammocharis coranica*  
*Boophane disticha*  
*Brunsvigia grandiflora*  
*Brunsvigia natalensis*  
*Crinum acaule*  
*Crinum graminicola*  
*Crinum lugardiae*  
*Crinum moorei*  
*Crinum nerinoides*  
*Crocasmia aurea*  
*Cyrtanthus angustifolius*  
*Cyrtanthus breviflorus*  
*Cyrtanthus falcatus*  
*Cyrtanthus galpinii*  
*Cyrtanthus guthrieae*  
*Cyrtanthus loddigesianus*  
*Cyrtanthus smithiae*  
*Eucomis vandermerwei*  
*Galtonia viridiflora*  
*Gladiolus cruentus*  
*Gladiolus ochroleucus*  
*Gladiolus oppositiflorus*  
*Gladiolus saundersii*  
*Gloriosa superba*  
*Haemanthus humilis*  
*Haemanthus montanus*  
*Lindneria clavata*  
*Littonia modesta*  
*Nerine appendiculata*  
*Nerine bowdenii*  
*Nerine laticoma* (=duparquetiana)  
*Nerine undulata* (=alta)  
*Rhodohypoxis baurii*  
*Rhodohypoxis milloides*  
*Rhodohypoxis rubella*  
*Sandersonia aurantiaca*  
*Scadoxus multiflorus*  
*Scadoxus puniceus*  
*Tritonia disticha*  
*Zantedeschia albomaculata*

*Zantedeschia pentlandii*  
*Zantedeschia rehmannii*

## Garden Subjects

### Aspect and growing medium

The summer-growing species suitable for garden culture generally prefer a very rich, but well-drained soil, in a partially shaded or full sun position. Many of these species (such as *Gloriosa superba* and the deciduous *Agapanthus* species) are not adversely affected by heavy winter rainfall during their dormant period and need little maintenance. The deciduous *Agapanthus* species are particularly useful for mixed plantings with winter-growing species such as *Chasmanthe floribunda*.

### Planting

The rootstocks are planted out in spring at the same depths recommended for container subjects. In sandy soil they can be planted deeper.

### Watering

A very good soaking once a week is recommended if natural precipitation is lacking.

## SOME PARTICULARLY DESIRABLE SUMMER-GROWING SPECIES FOR GARDENS

*Agapanthus campanulatus*  
*Agapanthus coddii*  
*Agapanthus inapertus*  
*Ammocharis coranica*  
*Brunsvigia natalensis*  
*Brunsvigia radulosa*  
*Crinum bulbisperrum*  
*Crinum macowanii*  
*Crinum moorei*  
*Crocasmia aurea*

*Crocosmia pottsii*  
*Cyrtanthus falcatus*  
*Eucomis autumnalis*  
*Eucomis bicolor*  
*Eucomis comosa*  
*Eucomis pole-evansii*  
*Galtonia candicans*  
*Galtonia viridiflora*  
*Gladiolus dalenii*  
*Gladiolus ochroleucus*  
*Gladiolus oppositiflorus*  
*Gloriosa superba*  
*Hypoxis hemerocallidea (=rooperi)*  
*Littonia modesta*  
*Nerine alta*  
*Nerine bowdenii*  
*Nerine krigei*  
*Ornithogalum saundersiae*  
*Scadoxus multiflorus*  
*Scadoxus puniceus*  
*Schizostylis coccinea*  
*Scilla natalensis*  
*Tritonia disticha*  
*Tritonia nelsonii*  
*Watsonia densiflora*  
*Zantedeschia albomaculata*  
*Zantedeschia pentlandii*  
*Zantedeschia rehmannii*

## WINTER-GROWING SPECIES

The species belonging to this group occur naturally in the Richtersveld, throughout Namaqualand, the western, south-western and southern Cape and the Little Karoo; the Great Karoo contains fewer species and the diversity decreases markedly as one moves eastwards, terminating in the Eastern Cape. The growth cycle of most species in this group is characterized by the production of new vegetative growth in autumn, as soon as temperatures begin to fall after the long dry summer. This is

followed by very rapid vegetative growth during winter and flowering in spring. Seed production and dispersal takes place in early summer and the plant is then dormant until the next autumn. The growth cycle of most members of the Amaryllidaceae is somewhat different in that flowering takes place in late summer, before vegetative growth begins.

## Container Subjects

With the obvious exception of the more robust members of this group, such as the larger watsonias, the vast majority of these species can be very successfully cultivated in containers. In many instances, container cultivation is the only practical way to grow many of the more delicate species of *Gethyllis*, *Gladiolus* and *Ixia*.

## Aspect

In general, a sunny aspect with free air circulation is required for the winter-growing species. In areas with mild winters, pots can be arranged together in groups on a stoep or patio, and flat-dwellers can use window-boxes on a sunny balcony. It is important that pots should not be placed in positions where they will overheat on very hot days. In areas with heavy winter rainfall, such as in the southern suburbs of the Cape Peninsula, the more delicate species are best grown under cover. Avid growers of such bulbous plants will be inclined to erect their own structure with benches, open sides and glass-fibre roof, where their ever-expanding collection can be maintained.

## Growing medium

Perfect drainage of the growing medium

is one of the most important factors when cultivating bulbous plants. In the wild, the vast majority of winter-growing species occur in nutrient-poor soils which drain rapidly and therefore the temptation to grow these species in rich, water-retentive soil must be avoided.

The most important component of the growing medium is sand, which should preferably be a medium-grained, washed river or industrial sand. For easily cultivated species such as *Gladiolus carneus*, *Lachenalia unicolor* and *Moraea loubseri*, a medium consisting of two parts river or industrial sand, one part loam and one part fine compost is recommended. For less easily cultivated species such as *Hessee zeyheri*, *Gladiolus citrinus* and *Lachenalia ameliae*, the amount of loam should be reduced considerably, or dispensed with entirely. Difficult species such as *Tritonia watermeyeri*, *Gladiolus debilis*, *Ixia viridiflora* and the amaryllid genera such as *Gethyllis*, *Haemanthus* and *Strumaria*, should be grown in a medium of, say, three parts river or industrial sand and one part fine compost (the compost can be dispensed with entirely, in which case a mixture of equal parts river and industrial sand is recommended).

Growers will discover their own ideal growing medium - but there can be no doubt that the more sand incorporated into the growing medium, the better the results will be.

A layer of broken crocks, stone or bark chips should always be placed over the drainage holes at the bottom of the container, and a thin layer of fine compost should be placed over this to prevent the finer growing medium from washing out. The rest of the container

can then be filled with the appropriate growing medium.

Ordinary deep, brown plastic pots are ideal - a 15 cm pot is suitable for the low-growing genera such as *Oxalis*, *Polyxena* and *Galaxia*, while a 20 cm pot is suitable for medium-sized species of *Geissorhiza*, *Lachenalia* and *Romulea*. Taller species of *Gladiolus*, *Ixia* and all the dwarf amaryllids (such as *Gethyllis*, *Hessee* and the smaller nerines) require a 25 cm pot. A 30 cm pot is recommended for those species with vigorous root systems such as *Moraea aristata* and the dwarf watsonias. A 35 cm pot is recommended for those species with very large bulbs, such as *Brunsvigia orientalis*, *Boophane haemanthoides* and *Veltheimia capensis*.

#### Planting

Rootstocks are planted out from March to May, April being the most suitable month. Members of the family Amaryllidaceae, all of which have perennial fleshy roots, should not be disturbed once they are established, but if they have to be transplanted, it should be done immediately after the new leaves start to appear, while the bulbs are in active growth.

The depth of planting depends on the species but, as a general rule, they should be planted at a depth of about three times the height of the rootstock. Exceptions to this rule are the genera *Androcymbium*, *Antholyza*, *Babiana* and *Cyanella*, which are planted twice as deep, while the bulbines, bulbinellas, dwarf ornithogalums and most amaryllids are planted just below the surface. *Veltheimia capensis* and some of the boophanes are planted with at least two-thirds of the bulb above ground level.

### Watering

Once planted, pots should be watered well, and then not again until the leaf shoots begin to appear, after which a good soaking every fortnight is recommended for most species, as opposed to light applications at irregular intervals. Over-watering of container-grown species will soon lead to rotting, and as a general rule it is preferable for the growing medium to be slightly dry, rather than too wet. This applies particularly to members of the family Amaryllidaceae, such as *Gethyllis*, *Hessea* and *Strumaria*, which should be watered about once a month. Exceptions to the general rule are species of *Geissorhiza*, such as *G. darlingensis* and *G. radians*, as well as *Onixotis triquetra*, which require a continually moist medium during the growing period.

Towards the end of spring, as temperatures rise, the plants begin to go dormant, which is indicated by a yellowing of the leaves. Watering must now be withheld completely, and as soon as seed has been harvested and the foliage has completely withered, the containers can be placed in a cool dry place and stored.

### SOME PARTICULARLY DESIRABLE WINTER-GROWING SPECIES FOR CONTAINERS

*Bokkeveldia salteri*  
*Lachenalia viridiflora*  
*Lapeirousia corymbosa*  
*Lapeirousia silenoides*  
*Moraea aristata*  
*Moraea atropunctata*  
*Moraea gigandra*  
*Moraea insolens*  
*Moraea loubseri*

*Moraea neopavonia*  
*Moraea villosa*  
*Nerine humilis*  
*Nerine sarniensis*  
*Onixotis triquetra*  
*Ornithogalum dubium*  
*Ornithogalum maculatum*  
*Ornithogalum thyrsoides*  
*Oxalis hirta*  
*Oxalis massoniana*  
*Oxalis obtusa*  
*Oxalis pardalis*  
*Romulea flava*  
*Romulea monadelphae*  
*Romulea rosea*  
*Romulea sabulosa*  
*Romulea subfistulosa*  
*Sparaxis elegans*  
*Sparaxis grandiflora*  
*Sparaxis tricolor*  
*Spiloxene capensis*  
*Strumaria barbariae*  
*Strumaria truncata*  
*Tritonia crocata*  
*Tritonia squalida*  
*Tritonia watermeyerii*  
*Veltheimia capensis*  
*Watsonia aletroides*  
*Watsonia humilis* (=roseoalba)  
*Watsonia laccata* (=brevifolia)  
*Watsonia spectabilis*  
*Watsonia stenosphon*  
*Watsonia strictiflora*

### Garden subjects

Relatively few species of winter-growing geophytes are suited to general garden culture because of their delicate nature, extremely short flowering period, the depredations of moles or their inability to withstand garden irrigation during the dormant period.

### *Apect and growing medium*

As with container subjects, a sunny aspect with free air circulation is required for the winter-growers. Soil must be very well-drained, but generally species suited to garden culture are able to withstand less well-drained soils than species that can only be grown in containers.

Drainage can be improved by mixing in large quantities of fine compost and sand.

Slightly sloping ground is ideal for planting as it allows for good water run-off. The rockery is a suitable spot in which to plant groups of the same species but where moles are prevalent, the smaller species will have to be grown in sunken wire baskets. Bulbous plants are displayed to great advantage by inter-planting with low growing spring annuals such as *Nemesia strumosa* and *Dorotheanthus bellidiformis*.

### *Planting*

The rootstocks are set out from March to May at the same depths recommended for container subjects, but in extremely sandy soil they can be planted deeper.

### *Watering*

After planting, the rootstocks should be watered well and not again until the leaf shoots appear, after which a fortnightly soaking can be given, if natural precipitation is lacking.

The species recommended for garden culture are generally those that can withstand a fair amount of garden irrigation during the dormant period, but if one is unable to lift, store and re-plant them every year, they are best planted in areas of the garden that receive as little water as possible during summer.

## **SOME PARTICULARLY DESIRABLE WINTER-GROWING SPECIES FOR GARDENS**

*Amaryllis belladonna*  
*Babiana angustifolia*  
*Babiana disticha*  
*Babiana rubrocyanea*  
*Babiana stricta*  
*Babiana villosa*  
*Brunsvigia bosmaniae*  
*Brunsvigia josephinae*  
*Brunsvigia orientalis*  
*Bulbinella nutans*  
*Chasmanthe aethiopica*  
*Chasmanthe floribunda*  
*Cyanella orchidiformis*  
*Cybistetes longifolia*  
*Freesia alba*  
*Gladiolus angustus*  
*Gladiolus carneus*  
*Gladiolus liliaceus*  
*Gladiolus priorii*  
*Gladiolus tristis*  
*Gladiolus undulatus*  
*Haemanthus coccineus*  
*Haemanthus sanguineus*  
*Homeria comptonii*  
*Homeria ochroleuca*  
*Ixia conferta*  
*Ixia flexuosa*  
*Ixia maculata*  
*Ixia polystachya*  
*Lachenalia aloides*  
*Lachenalia arbuthnotiae*  
*Lachenalia bulbifera*  
*Lachenalia contaminata*  
*Lachenalia mathewsii*  
*Lachenalia pustulata*  
*Lachenalia unicolor*  
*Lachenalia viridiflora*  
*Moraea aristata*  
*Moraea gigandra*  
*Moraea loubseri*

*Moraea villosa*  
*Nerine humilis*  
*Nerine samiensis*  
*Onixotis triquetra*  
*Ornithogalum thyrsoides*  
*Oxalis hirta*  
*Oxalis pardalis*  
*Oxalis purpurea*  
*Romulea flava*  
*Sparaxis grandiflora*  
*Sparaxis tricolor*  
*Tritonia crocata*  
*Tritonia squalida*  
*Veltheimia capensis*  
*Wachendorfia paniculata*  
*Watsonia borbonica*  
*Watsonia humilis*  
*Watsonia hysteroantha*  
*Watsonia marginata*  
*Watsonia meriana*  
*Watsonia vanderspuyiae*  
*Watsonia versfeldii*  
*Zantedeschia aethiopica*

## PROPAGATION AND CARE OF BULBOUS PLANTS

### Seed

In general, the winter-growing species are sown in autumn (March to May), and the summer-growing species in spring (August to October). Evergreen species from the winter rainfall areas are best sown in autumn and those from the summer rainfall areas in spring. Exceptions to the above general rules are the *Agapanthus* species and all members of the family Amaryllidaceae, which should be sown as soon as they are ripe. Generally speaking, fresh seed of bulbous plants germinates readily but there are certain exceptions, such as *Sandersonia aurantiaca* which can take

up to three or four years to germinate.

Deep seed trays or pots should be used and the sowing medium should preferably be sterilized. The sowing medium used will depend on the species, but a good general medium is equal parts river or industrial sand, and fine compost or loam. For the more delicate species, the amount of compost or loam should be reduced. Seed must be sown thinly to prevent overcrowding and allow sufficient room for the developing roots. Seed of most species need only be covered with a thin layer of sand, while the large fleshy seeds of many of the amaryllid genera are simply pressed into the medium, to rest on, or just below, soil level. An exception is the genus *Cyrtanthus* whose flattened dry seeds can also be germinated by placing in glass containers filled with water. The water should be replaced about once a week, and when the seedlings have produced a few leaves, they are then transferred to pots or seed trays. The seedlings of all bulbous plants should remain in the seed tray or pot for at least one full season; in many instances they should remain undisturbed for two to three seasons before being planted out into permanent containers or into the garden.

### Offsets, bulbils and cormels

Offsets formed on bulbs and corms are removed during the dormant period when large enough. Corm offsets can be stored dry until the following planting time, but bulb offsets of species with perennial fleshy roots (e.g. members of the Amaryllidaceae) should be replanted immediately. Several species of *Lachenalia* reproduce by bulbil formation

on leaf bases, or at the tips of stolons (a branch that rests on the ground). Numerous members of the Iridaceae also produce cormels at the tips of stolons. Bulbils and cormels are removed during the dormant period and stored until planting time.

### **Division of rhizomatous rootstocks**

Those genera with rhizomatous rootstocks such as *Clivia*, *Agapanthus* and *Kniphofia* are propagated vegetatively by lifting a large clump and prizing it apart with two large forks placed back to back in the centre. The foliage is then cut back by about one third and the individual portions of rootstock are replanted as soon as possible.

### **Leaf cuttings**

Propagation by leaf cuttings is an effective way of increasing stocks of the genus *Lachenalia*. Leaves for cutting material should be virus-free and preferably in active growth. Depending on leaf size, the leaf material is cut into cross sections and placed in a well-drained rooting medium such as equal parts river sand and vermiculite, with the base of the cutting about 1 cm below the surface. The cuttings are placed in a shaded position and kept only slightly moist. Bulblets begin to form at the base of the cutting after about one month. Remove and store at the end of the growing season and plant out in autumn.

### **Feeding**

Indigenous bulbous plants can, in general, be grown successfully without any supplementary feeding because of their low nutritional requirements, but this is not to say that feeding is not

recommended. Most species respond very readily to feeding, and fertilizers with a high potash but low nitrogen content are recommended. Slow-release fertilizers can be incorporated into the upper part of the growing medium, or sprinkled on the surface. Liquid fertilizers, such as Kelpak 66, can be used at a weaker rate than recommended, at fortnightly intervals.

### **Pests and diseases**

Under cultivation, bulbous plants are subject to various pests and diseases. The following is a list of the more important ones, with suggested measures for their control. Active ingredients and recommended pesticides and fungicides are mentioned.

### **APHIDS**

Primicarb (e.g. Pirimor) as a full cover spray.  
Mercaptothion (e.g. Malathion) as a full cover spray  
Chlorpyrifos (e.g. Dursban) as a full cover spray.

### **CATERPILLARS**

Carbaryl (e.g. Karbaspray) as a full cover spray.  
Trichlorfon (e.g. Dipterex) as a full cover spray.

### **MEALYBUG**

Chlorpyrifos (e.g. Dursban) for control during the growing period as a full cover spray or drench.  
Mercaptothion (e.g. Extermathion) for control on loose rootstocks during storage as a full cover dust.

### **RED SPIDER MITE**

Propargite (e.g. Omite) as a full cover

spray.

Dicofol (e.g. Kelthane) as a full cover spray.

## SLUGS AND SNAILS

Metaldehyde (e.g. Snailban) as a bait.

Methiocarb (e.g. Mesuro) as a bait.

## SNOUT BEETLES

Cypermethrin (e.g. Ripcord) as a full cover spray.

Mercaptothion (e.g. Malathion) as a full cover spray.

## THRIPS

Fenthion(e.g. Lebaycid) as a full cover spray.

Mercaptothion (e.g. Malathion) as a full cover spray.

## WHITEFLY

Diazinon (e.g. Dazzel) as a full cover spray.

Phenothrin (e.g. Garden Gun) as a full cover spray.

## DISEASES

### DAMPING-OFF

Captab (e.g. Orthocide) as a seed-dusting treatment prior to sowing, or as a full cover spray on seedlings.

Benomyl (e.g. Benlate) as a drench.

## FUNGAL ROTTING

Captab (e.g. Orthocide) as a full cover dusting treatment.

## RUST

Mancozeb (e.g. Dithane) as a full cover spray.

## LEAF SPOTS

Iprodione (e.g. Rovral) as a full cover spray.

## VIRUS

Destroy material immediately.

*The above mentioned chemicals are poisonous and potentially dangerous; apply with great care.*

## Sources of supply

By joining the Botanical Society of South Africa, you can take advantage of their annual catalogue of surplus seed supplied by the National Botanical Institute. This usually has a wide selection of bulbous species on offer.

Membership of the Indigenous Bulb Growers Association of South Africa (IBSA) will keep you in touch with others interested in bulbs. The Association publishes an annual bulletin and holds meetings, outings and talks.

For further information about these societies write to:

The Executive Secretary,  
Botanical Society of SA,  
Private Bag X7,  
CLAREMONT, 7735

The Secretary, IBSA,  
3 The Bend,  
EDGEMead, 7441

## Bulbs

### Agapanthus

### Alliaceae

One of the most popular South African plants, which is seen flowering in nearly every garden in the country during summer, is the agapanthus. Usually it is only *A. praecox* subsp. *orientalis* that is grown but there are many more which are well worth cultivating for variety. The flowers of agapanthus provide a wonderful range of blues which are so valuable for colour contrast and make excellent cut flowers. The flowers are borne in a head or umbel at the tip of a sturdy, upright stem, each one attached to a short flower-stalk which radiates from a central point. Some heads are rounded in shape, while others have drooping flowers. The long narrow leaves grow in a tuft at the base. They vary in size and colour, some being a deep green and others a bluish-green.

There are both evergreen and deciduous agapanthus, the latter disappearing and becoming dormant during winter. *Agapanthus* has a tuberous rootstock and fleshy roots. *Agapanthus* needs very little attention, except watering. Their strong roots hold the soil on banks and can be used to check storm water. They multiply well and grow easily from seed. They will grow in sunshine or in shade and, in fact are ideal garden plants. They flower throughout the summer months, some commencing as early as October and others continuing until March, but the main flowering period is in December and January. The best time to divide the deciduous types of agapanthus is in August. They should be replanted as soon after dividing as possible and the roots should not be allowed to dry out.

### Agapanthus 'Tinkerbell'

### Alliaceae

A dwarf species with blue flowers in summer, plant evergreen, leaves variegated.

### Agapanthus campanulatus subsp. campanulatus

### Alliaceae

Pale or deep blue flowers, spreading perianth segments, sow autumn.

600 mm

### Agapanthus campanulatus subsp. campanulatus

### Alliaceae

'Hardingsdale'

Deciduous, summer growing, bright blue flowers in medium sized umbels on long flower stalk, summer flowering, prefers semi-shaded position, sow autumn.

1 - 1.4 m

### Agapanthus campanulatus subsp. patens

### Alliaceae

Dormant in winter, frilly blue flowers, summer-flowering, sow autumn.

500 mm

<b>Agapanthus caulescens subsp. angustifolius</b> Deciduous, summer growing, very dark blue flowers in late summer, very desirable, sow autumn.	Alliaceae 1 m
<b>Agapanthus caulescens subsp. angustifolius</b> 'Politique' Deciduous, summer growing, attractive erect grey- greenleaves, very dark blue flowers in mid summer, sow autumn.	Alliaceae 1-1.5m
<b>Agapanthus caulescens subsp. caulescens</b> Deciduous, summer growing, dormant in winter, bright blue flowers in summer, sow autumn.	Alliaceae 1m
<b>Agapanthus coddii</b> Bright blue flowers in midsummer, very attractive upright foliage, dormant in winter, sow autumn.	Alliaceae 1 - 1.5 m
<b>Agapanthus comptonii subsp. comptonii</b> Evergreen, one of the 'dwarf' species, blue flowers in summer, very floriferous, ideally suited to the small garden or as a pot subject, sow in autumn.	Alliaceae 0.5 - 1m
<b>Agapanthus comptonii subsp. longitubus</b> Evergreen, one of the 'dwarf' species, pale blue flowers in summer, free-flowering, good groundcover, ideal for small gardens or as pot subject, sow autumn.	Alliaceae 500-900 mm
<b>Agapanthus dyeri</b> Deciduous, blue pendulous flowers in summer, needs sun and rich soil. Sow in autumn.	Alliaceae 0.5 m
<b>Agapanthus inapertus subsp. hollandii</b> Deciduous, summer growing, dormant in winter, pendulous dark blue flowers in summer, sow in autumn.	Alliaceae 0.8 - 1.2 m
<b>Agapanthus inapertus subsp. hollandii 'Lydenburg'</b> Deciduous, summer growing, winter dormant, pendulous dark blue flowers in summer, sow in autumn.	Alliaceae 0.8 - 1.2 m

<b>Agapanthus inapertus subsp. hollandii ‘Sky’</b>	Alliaceae
Deciduous, summer growing, winter dormant, pendulous sky blue flowers in summer, sow in autumn.	1.2 - 1.4 m
<b>Agapanthus inapertus subsp. inapertus</b>	Alliaceae
Deciduous, summer growing, pendulous blue or white flowers in summer, sow in autumn.	1 - 2 m
<b>Agapanthus inapertus subsp. intermedius</b>	Alliaceae
Deciduous, summer growing, dormant in winter, flowers blue in small heads on long stalks, sow in autumn.	1 - 1.5 m
<b>Agapanthus inapertus subsp. intermedius ‘Wolkberg’</b>	Alliaceae
Deciduous, summer growing, bright blue flowers in small umbels on extremely long stalks, sow autumn.	1 - 1.5 m
<b>Agapanthus inapertus subsp. pendulus</b>	Alliaceae
Dark blue pendulous flowers in summer, dormant in winter, sow in autumn.	0.8 - 1 m
<b>Agapanthus inapertus subsp. pendulus ‘Graskop’</b>	Alliaceae
Deciduous, summer growing, very striking dark blue pendulous flowers in summer, sow in autumn.	0.8 - 1 m
<b>Agapanthus nutans</b>	Alliaceae
Blue flowers in summer, dormant in winter, shade-loving, sow in autumn.	1 m
<b>Agapanthus praecox ‘Dwarf White’</b>	Alliaceae
Evergreen, tussock height about 165 mm, white flowers in early summer, flower stalks to 500 mm, very floriferous, multiplies well, ideal for rockeries, sow in autumn.	150 - 500 mm
<b>Agapanthus praecox ‘Elegans’</b>	Alliaceae
Evergreen, blue flowers in summer, sow autumn.	500 mm
<b>Agapanthus praecox ‘Medium White’</b>	Alliaceae
Evergreen, tussock height about 330 mm, compact white flower heads in summer, flower stalks to 800mm, sow in autumn.	300 - 800 mm

<b>Agapanthus praecox 'Miniature White'</b>	Alliaceae
Evergreen, narrow leaves, tussock about 300 mm high, flowers white, summer, flower stalks to 650 mm tall, sow autumn.	300 - 650 mm
<b>Agapanthus praecox 'White'</b>	Alliaceae
Summer-flowering, flowers white, popular for bouquets.	1 m
<b>Agapanthus praecox subsp. minimus</b>	Alliaceae
Evergreen, blue flowers in summer, sow autumn, grow in full sun.	800mm
<b>Agapanthus praecox subsp. minimus 'Adelaide'</b>	Alliaceae
Evergreen, tussock approx 500 mm, blue flowers in summer, flower stalks to 800 mm tall, prefers partial shade, good groundcover, sow in autumn.	500 - 800 mm
<b>Agapanthus praecox subsp. minimus 'Dwarf Blue'</b>	Alliaceae
Evergreen, foliage about 350 mm, flowers blue, summer, flower stalks to 800 mm, sow autumn.	350 - 800 mm
<b>Agapanthus praecox subsp. minimus 'Forma'</b>	Alliaceae
Evergreen, blue flowers in summer, requires rich soil, liberal watering, sow in autumn.	1 m
<b>Agapanthus praecox subsp. minimus 'Storms River'</b>	Alliaceae
An evergreen medium sized species with unusual pale 600 - ice-blue flowers in summer. Grow in full sun or light shade, excellent garden subject, sow in autumn.	800 mm
<b>Agapanthus praecox subsp. orientalis</b>	Alliaceae
Large blue or white flowerheads in summer, evergreen, grow in partial shade or full sun, sow in autumn.	1m
<b>Agapanthus praecox subsp. orientalis 'Mt Thomas'</b>	Alliaceae
Evergreen, bright blue compact flowerheads in summer, grey foliage, sow in autumn.	0.8 - 1.2 m
<b>Agapanthus praecox subsp. orientalis 'Weaver'</b>	Alliaceae
Evergreen, large blue flowerheads in summer, floriferous, semi-shade, sow in autumn.	1m

<b>Agapanthus praecox subsp. praecox</b>	Alliaceae
Evergreen, broad leathery leaves, large blue flowerheads in summer, does well in sun or shade, sow in autumn.	1 m
<b>Agapanthus praecox subsp. praecox 'Azure'</b>	Alliaceae
Large, dark blue flowerheads in midsummer, broad evergreen leaves, prefers partial shade, sow in autumn.	1 - 2 m
<b>Agapanthus praecox subsp. praecox 'Floribunda'</b>	Alliaceae
Evergreen, attractive leaves, large heads of blue flowers in summer, full sun or semi-shade, sow in autumn.	1 m
<b>Albuca canadensis</b>	Hyacinthaceae
Geldbeursie, Slangbol	
Deciduous, winter growing, summer dormant , greenish yellow flowers in spring, broad grey-green leaves, sow in autumn.	400 -700 mm
<b>Albuca nelsonii</b>	Hyacinthaceae
Evergreen bulb with straplike leaves and a long spike of white striped green, scented flowers. Spring to summer flowering, good cut flower, sow in spring. Suitable for rockeries or embankments in semi-shade.	1 m
<b>Amaryllis belladonna</b>	Amaryllidaceae
March lily	
Showy large bell-like pink flowers in summer. Sow in autumn.	900 mm
<b>Ammocharis coranica</b>	Amaryllidaceae
Berglelie, Gifbol	
Bulbous plant with heads of attractive rose-pink flowers in Spring. Has distinctive leaves that lie flat on the ground. Plant in full sun in well drained soil. Keep dry in winter, sow as soon as ripe.	500 mm
<b>Anomatheca laxa</b>	Iridaceae
Deciduous, summer or winter growing, depends on rainfall, flowers red, pale blue or white, early summer flowering, prefers partial shade, sow autumn or spring.	150-300mm

<b>Aristea ecklonii</b>	Iridaceae	
Evergreen, small blue flowers in summer, does well in moist conditions, sow in autumn.	400 - 800 mm	
<b>Aristea major</b>	Iridaceae	
Aristea, Blousuurkanol		
An attractive plant with straplike leaves and tall dense spikes of blue or rarely pink flowers in summer, sow in autumn.	1 - 1.5 m	
<b>Babiana</b>	Iridaceae	
Babiana were named because the baboons found their corms good eating. They are to be found in many colours, predominantly blue as well as mauve, cream, yellow, white and shades of red, flowering in spring and early summer, recognisable by their strongly ribbed and slightly hairy leaves. They are best grown in pots and should be planted close together for best effect.		The fibrous corms should be planted in March, drainage must be good and the soil should be mixed with well-rotted compost, clay soil should have some sand added in addition to compost. The corms should be kept moist while growing and the ground must be deeply soaked in order to penetrate to the depth of the bulb. Water should be gradually withheld after flowering until the foliage has ripened completely.
<b>Babiana angustifolia</b>	Iridaceae	
Flowers blue with wine-red markings, spring-flowering, very attractive, grow in deep pots or rockery, sow autumn.	300 mm	
<b>Babiana cedarbergensis</b>	Iridaceae	
Scented blue and yellow flowers in late winter, dormant in summer, grow in pots or in the rockery, sow in autumn.	150 - 200 mm	
<b>Babiana disticha</b>	Iridaceae	
Bobbejaantjie		
Dark blue flowers in spring, fan-shaped leaves, dormant in summer, sow in autumn.	250 mm	
<b>Babiana nana</b>	Iridaceae	
Klipuintjie		
Scented blue or mauve flowers in spring, grow in pots, sow in autumn.	30 - 100 mm	

<b>Babiana patersoniae</b>	Iridaceae
A variety of colours, spring-flowering, dormant in summer, sow in autumn.	300 mm
<b>Babiana pygmaea</b>	Iridaceae
Geelbobbejaantjie	
Flowers large, yellow with a dark centre, spring, sow autumn.	20-60 mm
<b>Babiana ringens</b>	Iridaceae
Rats tail, Rotstert, Hanekam, Rooibobbejaanuintjie	
Pleated leaves, dormant in summer, red flowers in spikes in spring, sow in autumn.	200 mm
<b>Babiana rubrocyanea</b>	Iridaceae
Rooibloubobbejaantjie, Wine-cup babiana	
Blue flowers with red centre, spring flowering, striking, sow in autumn.	50 mm
<b>Babiana stricta</b>	Iridaceae
Stompstertbobbejaantjie	
Dark pink flowers in spring, ideal for rock garden, dormant in summer, sow in autumn.	350mm
<b>Babiana tubulosa var. tubulosa</b>	Iridaceae
Very attractive long tubed cream coloured flowers with red markings, in late spring, dormant in summer, grow in deep pots, sow autumn.	70-150 mm
<b>Babiana villosa</b>	Iridaceae
Rooibobbejaantjie, Red babiana	
Wine red flowers in spring, dormant in summer, sow autumn.	300mm
<b>Bobartia aphylla</b>	Iridaceae
A tall grass-like plant with long thin reed-like stems and groups of bright yellow flowers arranged at their ends. This plant needs to be used together with other plants, especially fynbos, for its contrasting growth form and unusual flowers.	
<b>Boophane disticha</b>	Amaryllidaceae
Gifbol, Tumble-weed	

Produces deep pink flowers in spring, spent heads tumble in wind. Bulb is poisonous. Sow as soon as seed is ripe.

**Brunsvigia orientalis**

Flowers in large heads, deep pink to red, sandy flats. Sow seed as soon as ripe.

Amaryllidaceae  
400 - 500 mm

**Bulbine narcissifolia**

An evergreen, bulbous plant with attractive grey foliage and pale yellow flowers. Plant in full sun. Use compost-enriched soil and water moderately in summer. Keep dry in winter.

Asphodelaceae

**Bulbinella cauda-felis**

White flower spikes in spring, dormant in summer, sow in autumn.

Asphodelaceae  
750 mm

**Bulbinella latifolia var. doleritica**

Bright orange flowers in spring, dormant in summer, good cut flower, sow in autumn.

Asphodelaceae  
500 - 800 mm

**Bulbinella nutans**

Slender cream or yellow flower spikes, spring, good cut flower, sow in autumn.

Asphodelaceae  
0.3 - 1 m

**Chasmanthe aethiopica**

Suurkanolpypie

Attractive spikes of tubular orange flowers in early winter, deciduous, dormant in summer, sun or shade, sow in autumn. Good for coastal gardens.

Iridaceae  
300 - 600 mm

**Chasmanthe bicolor**

Red flowers with green markings, winter, very attractive, dormant in summer, good garden plant, extinct in nature, sow autumn.

Iridaceae  
700 - 900 mm

**Chasmanthe floribunda**

Suurkanol

Attractive spikes of tubular orange flowers in early winter, leaves die off in summer, grows in sun or shade, sow autumn. Will tolerate coastal conditions.

Iridaceae

1 m

### **Chasmanthe floribunda var. duckittii**

Attractive spikes of tubular primrose-yellow flowers in early winter, dormant in summer, good garden subject. It can be mixed with deciduous *Agapanthus* in attractive complementary plantings. Sow in autumn.

Iridaceae

1 m

### **Chlorophytum comosum**

Hen and chickens

A fast-growing groundcover, with green and white or plain green foliage. Plant in shade. Use well-drained, compost-enriched soil. Good in a hanging basket or as an indoor plant.

Asphodelaceae

### **Chlorophytum krookianum**

Tall elegant lily-like perennial, leaves basal, spikes of star-like white flowers in summer, prefers damp conditions, sow spring.

Asphodelaceae

### **Chlorophytum undulatum**

High spikes of white flowers in early spring, sow in autumn.

Asphodelaceae

300 mm

## **CLIVIAS AND THEIR CULTIVATION**

*Clivia* is a very showy evergreen, shade-loving genus (comprised of four species) which is endemic to South Africa. This choice garden plant is rapidly gaining in popularity amongst gardeners and in the horticultural industry at large. Of the four species, the most suitable for general cultivation is *Clivia miniata*, commonly known as bush lily, while *C. caulescens*, *C. gardenii* and *C. nobilis* are more collectors items and not quite as easy to grow. *C. miniata* produces an umbel of trumpet-shaped blooms in many different shades of orange or red, and there are also several different yellow forms of this species, known as *C. miniata* var. *citrina*. The species is mainly spring-flowering and it occurs naturally in the forests of

KwaZulu-Natal, Swaziland and Mpumalanga. The three other species all have narrow pendulous flowers in shades of orange, tipped with green. *C. nobilis* occurs in the Eastern Cape and is recognized by its tough, leathery foliage with blunt tips. It is generally smaller than the other two. It flowers mainly in early summer, but sporadic blooms may occur throughout the year. *C. gardenii* occurs in KwaZulu-Natal and the former Transkei and it has fewer, longer flowers borne in a semi-pendulous position, with clearly protruding stigmas. It blooms in autumn. *C. caulescens* comes from the Mpumalanga and the Northern Province and is easily recognized in mature specimens by its distinct main 'stem'. It flowers in early summer.

## Cultivation

Dappled shade is best for growing clivias but they will also thrive in quite heavy shade. They can take some morning sun but should then have shade for the rest of the day as excessive exposure to sun scorches the foliage. Clivias are seen to best advantage planted in large drifts under evergreen trees and in large containers on shady patios. They can take light frost but in areas of extreme winter temperatures, protection is required. In the landscape they can easily be mixed with other shade-loving plants like *Asparagus densiflorus*, *Impatiens* and the low-growing *Plectranthus species*. Clivias can also be grown indoors in positions receiving good light but not direct sunlight.

The underground portion of the *Clivia* plant is a rhizomatous rootstock with perennial fleshy roots similar to that of *Agapanthus*. It is important when planting clivias from nursery bags or replanting newly divided plants to ensure that they are placed at the same level as they were growing previously, as planting too deeply can cause the leaf bases to rot. In the landscape, plants can be spaced 40 - 50 cm apart, and three plants can be grown in a 35 cm diameter container.

The growing medium should ideally be a slightly acid, very well drained loam containing generous helpings of well decomposed organic matter like leaf mould or compost. Bone meal can also be mixed into the soil. It is important to prepare the soil very well, as once clivias have been planted, they should remain undisturbed for many years; best flowering results are always obtained from well established clumps.

Clivias require regular deep watering

during their flowering and growing period which is mainly from spring until the end of summer. They can withstand fairly dry conditions during winter, but are not adversely affected by heavy winter rainfall such as in the southern suburbs of the Cape Peninsula, provided the soil is very well drained.

Clivias, in particular *C. miniata*, benefit greatly from regular applications of liquid fertilizer like Seagro or Supranure, particularly when grown as container plants. Fertilizers are best applied from spring until the end of summer, and established clumps in the landscape can be mulched annually in spring with well-rotted compost.

## Pests and diseases

The most important pest attacking clivias in South Africa is the highly destructive lily borer, also known as amaryllis caterpillar. Preventative spraying with a carbaryl-based insecticide gives effective control. Snout beetles cause damage during summer by eating holes into the leaf margins and can be controlled with Ripcord. Mealy bug sometimes attacks the leaf bases of plants and can be controlled with Dursban. Slugs and snails can cause severe damage to the flowers and foliage. A fungus causes leaf die-back from the tips but can be controlled with weekly applications of Captab or Mancozeb.

## PROPAGATION

Clivias are easily raised from perfectly ripe seed. The seed can take up to 12 months to ripen on the mature plant, and it is harvested once the outer fleshy covering of each berry has turned a bright red or yellow. This fleshy covering

is removed revealing the hard, irregularly shaped seeds which are then sown in a well-drained medium such as equal parts river-sand, loam and fine compost. The seeds are simply pressed into the medium to rest just below the soil level and are best sown in deep seed trays, placed in a shaded position. They must be kept moist and germination takes place from about 6 weeks onwards, but can often take several months. Seedlings can be potted-up into 2 pint nursery bags at about 12 months old, and planted out into the garden or into permanent containers at 18 to 24 months. *C. miniata* can start flowering in its third year after germination if well grown, but the other three species take a couple more years to flower.

Offsets form very readily on *C. miniata*, but less frequently on the other three species. They can be separated when large enough, after the flowering period, and should be replanted

immediately. Very large clumps can be lifted and then prized apart placing two forks back to back in the centre. It is essential to retain as much root material as possible on each separated offset. Newly planted offsets will usually take a year or two to settle down before regular flowering commences again. Propagation by offsets is the most reliable method of obtaining exactly true to type material; attempts to propagate clivias by tissue culture have proved unsuccessful to date.

**Availability**

The orange and red forms of *Clivia miniata* are freely available from most retail nurseries in this country, while the yellow form remains a sought-after collector's item. The other three species are occasionally available from specialist bulb nurseries, and plants are offered from time to time at the Garden Shop at Kirstenbosch.

**Clivia gardenii**

Tubular orange flowers tipped with green, in autumn, likes shade, sow seed as soon as ripe.

Amaryllidaceae  
1m

**Clivia miniata**

Bush lily, Boslelie.

An evergreen bulb with a fountain of strap-shaped leaves and an umbel of attractive open faced orange tubular flowers presented on a sturdy stem. Shade loving. Sow seed immediately, as soon as ripe.

Amaryllidaceae  
600 mm

**Clivia miniata var. citrina**

Light yellow flowers in spring, shade-loving, evergreen, ideal for large pots. Sow seed as soon as ripe.

Amaryllidaceae  
600 mm

## **Crinum bulbispermum**

Amaryllidaceae

Orange River lily

0.4 - 1 m

A deciduous bulb with curved grey-green leaves up to 800 mm long. Bears large, pink, trumpet-shaped flowers on long stalks in Spring. Excellent for wetland or bog areas. Full sun. Sow seed as soon as ripe.

## **Crinum campanulatum**

Amaryllidaceae

Water crinum

500 mm

Bulbous plant up to 500 mm with strap-shaped green leaves and large, deep pink, lily-like flowers in Spring. Excellent for a pond or water garden. Can grow in water. Keep dry in winter or it will not flower. Sow seed as soon as ripe.

## **Crinum macowanii**

Amaryllidaceae

500 mm

Very large bell-shaped white flowers with dark pink stripes in spring and summer, large fleshy leaves, dormant in winter, likes full sun and moist conditions. Sow seed as soon as ripe.

## **Crinum moorei**

Amaryllidaceae

Ngomi lily, Boslelie

1 - 1.5 m

Shade-loving, pink bells in summer or autumn. Sow seed as soon as ripe.

## **Crocasmia aurea**

Iridaceae

Montbretia

0.5 - 1m

Bright yellow-orange star-shaped flowers, summer, rich soil, evergreen in mild areas. This is a lovely delicate bulb which will brighten up any shady garden. Sow spring.

## **Cyanella alba**

Tecophilaeaceae

Toe-toe-uintjie

70-250mm

Deciduous, winter-growing summer dormant, flowers white, yellow or pale pink, spring, leaves grass like, sow autumn, grow in full sun and well-drained soil in rockery or deep pots.

<b>Cyanella lutea</b>	Tecophilaeaceae
Rosette of leaves, bright yellow flowers in branched spikes in spring, sow in autumn.	300mm
<b>Cyanella orchidiformis</b>	Tecophilaeaceae
Deciduous, winter-growing, mauve flowers in winter and spring, ideal for the rockery, sow autumn.	600mm
<b>Cyrtanthus brachyscyphus</b>	Amaryllidaceae
Orange-red flowers in summer, evergreen, prefers semi-shade, sow spring.	250 mm
<b>Cyrtanthus elatus</b>	Amaryllidaceae
George lily	
Commonly red flowers in summer but occasionally pink or white, takes sun or shade, evergreen. Sow seed in autumn.	600 mm
<b>Cyrtanthus falcatus</b>	Amaryllidaceae
Fire lily	
Deciduous, summer growing, flowers pendulous, red and green, in spring, tender to half-hardy, very attractive, easily cultivated, a third of the bulb should show above ground, requires good drainage, sow spring.	250-350mm
<b>Cyrtanthus herrei</b>	Amaryllidaceae
Evergreen, flowers dark orange, pendulous, in late summer - autumn, attractive grey-green leaves, NB two thirds of the bulb should show above ground.	300-500mm
<b>Cyrtanthus mackenii</b>	Amaryllidaceae
Orange flowers in summer, evergreen, likes full sun and moist soil, sow in spring.	450mm
<b>Cyrtanthus mackenii var. cooperi</b>	Amaryllidaceae
Scented yellow flowers for most of the year, evergreen, good pot subject, sow spring.	450mm
<b>Cyrtanthus obrienii</b>	Amaryllidaceae
Striking red flowers in winter, long flowering period. Stunning plants for tubs or beds, in the shade, sow in spring.	

## **Cyrtanthus sanguineus**

Amaryllidaceae

Kei lily

Pink or orange flowers in autumn, evergreen, likes light shade and very well-drained soil, best grown in containers, sow in autumn.

200 - 250 mm

## **Dierama floriferum**

Iridaceae

Grasklokkies, Harebell

A clumped, grass-like perennial with many long flowering stems with delicate mauve flowers. Leave corns to multiply for a few years. Cut back old leaves to keep plant tidy. Sow in spring.

## **Dierama pendulum**

Iridaceae

Harebell, Grasklokkie

Pendulous pink flowers in early summer, evergreen, water-loving, sow in spring.

1 m

## **Dierama pulcherrimum**

Iridaceae

Harebells, Grasklokkie

Form tall grassy clumps with long slender drooping spikes of bell-shaped pink flowers in winter. Sow in spring.

1m

## **Dierama robustum**

Iridaceae

White or mauve-pink flowers in midsummer, evergreen, likes full sun in rich soil, sow in spring.

1-1.5m

## **Dietes bicolor**

Iridaceae

Yellow wild iris

Iris-like flowers, yellow with black/brown markings, damp conditions, sow in spring.

1m

## **Dietes butcheriana**

Iridaceae

White iris-like flowers with pale orange markings in spring and summer, must have shade, evergreen beautiful fan of broad green leaves, sow in spring.

0.75m

## **Dietes flavida**

Iridaceae

Wild iris

Evergreen herbaceous perennial with interesting leaves which are occasionally twisted. Bears white flowers in summer. Drought and frost hardy. Sow in spring.

1 m

<b>Dietes grandiflora</b>	Iridaceae
Butterfly iris	
Iris-like flowers, mauve and white with yellow markings, must have sun to flower, but good groundcover under trees. Sow in spring.	1m
<b>Dietes iridioides</b>	Iridaceae
Iris-like flowers white and mauve with yellow markings, will grow in shade, evergreen, sow in spring.	500 mm
<b>Drimiopsis maculata</b>	Hyacinthaceae
Very attractive spotted leaves, insignificant flowers, likes shade, ideal for containers.	200 - 300 mm
<b>Eucomis autumnalis</b>	Hyacinthaceae
Pineapple lily	
A rosette of erect broad leaves, a single stemmed flower head resembling a yellow-green pineapple. Summer flowering and winter dormant. Suitable for semi-shade or full-sun, long-lasting, good for flower arrangements. Sow in spring.	300 mm
<b>Eucomis hybrid</b>	Hyacinthaceae
Dormant in winter, summer-flowering, good cut flower, sow in spring.	600 mm
<b>Eucomis montana</b>	Hyacinthaceae
Pineapple lily	
A bulbous plant with attractive leaves marked with deep purple. Cream flowers with purple markings, borne on dense spikes. Dormant in winter. Plant in full sun. Rare species. Sow in spring.	400 mm
<b>Eucomis pole-evansii</b>	Hyacinthaceae
Green and purple flowers in summer, dormant in winter, sow in spring.	1-2m
<b>Freesia alba</b>	Iridaceae
Wild freesia, Ruikypie	
Flowers white with mauve and yellow markings, strongly, scented, spring flowering, sow in autumn.	100-150 mm

<b>Freesia corymbosa</b>	Iridaceae
Buttercup, Aandblommetjie	
Deciduous, winter-growing, fragrant pink flowers in spring, sow autumn, very attractive. Grow in deep pots.	250-500mm
<b>Freesia refracta</b>	Iridaceae
Freesia, Flissie, Kammetjie	
Deciduous, winter-growing, flowers greenish white with orange markings, strong spicy scent, in spring, sow autumn.	180 - 450 mm
<b>Freesia sp. (Yellow)</b>	Iridaceae
Pale yellow flowers in spring, dormant in summer, grows in pots. Sow in autumn.	150 - 300 mm
<b>Galtonia candicans</b>	Hyacinthaceae
White hanging bells on long stems in summer, dormant in winter, likes sun or semi-shade, sow in spring.	1-2m
<b>Geissorhiza aspera</b>	Iridaceae
A winter growing bulb with attractive blue-violet flowers in spring. A fairly hardy pot subject. Sow in autumn.	350mm
<b>Geissorhiza darlingensis</b>	Iridaceae
Deciduous, winter-growing, sticky linear leaves, flowers large pale yellow with a dark purple centre, spring, sow autumn.	70-150mm
<b>Geissorhiza eury stigma</b>	Iridaceae
Deciduous, winter-growing, flowers dark blue with a red centre, spring, sow autumn.	80-200mm
<b>Geissorhiza imbricata</b>	Iridaceae
Flowers white with broad red stripes on the outside. Sow in autumn.	150 mm
<b>Geissorhiza inflexa</b>	Iridaceae
Flowers in shades of pink, spring-flowering, dormant in summer, pot culture, sow in autumn.	250 mm

<b>Geissorhiza mathewsii</b>	Iridaceae
Wine cup, Kelkiewyn	
Dark blue flowers with red centres in spring, dormant in summer, grow in pots, needs regular heavy watering in winter and spring, sow autumn.	
<b>Geissorhiza monanthos</b>	Iridaceae
Deciduous, winter-growing; flowers dark blue-violet marked with pale yellow or red in the centre, spring flowering; tender to half-hardy, sow autumn.	60 -200mm
<b>Geissorhiza radians</b>	Iridaceae
Wine cup, Kelkiewyn	
Flowers violet with ruby centre, pot culture, sow in autumn.	200 mm
<b>Geissorhiza splendidissima</b>	Iridaceae
Very attractive shiny dark purple-blue flowers with black centre, spring-flowering, dormant in summer, pot culture, sow autumn.	250 mm
<b>Geissorhiza tulbaghensis</b>	Iridaceae
Large white flowers with dark markings in centre, spring, dormant in summer, pot culture, sow autumn.	220 mm
<b>Gethyllis ciliaris</b>	Amaryllidaceae
Kukumakranka	
A winter growing deciduous species with white flowers in mid summer followed by aromatic capsules in autumn. Sow seed as soon as ripe.	
<b>Gladiolus ‘Chopin’</b>	Iridaceae
Multi-coloured blooms in spring, dormant in summer, sow in autumn.	300 mm
<b>Gladiolus alatus</b>	Iridaceae
Kalkoentjie	
Flowers bright orange, spring, dormant in summer, grow in pots, sow in autumn.	100-200mm
<b>Gladiolus alatus var. meliusculus</b>	Iridaceae
Flowers salmon pink, spring, dormant in summer, grow in pots, sow in autumn.	300 mm

<b>Gladiolus angustus</b>	Iridaceae
Long-tubed painted lady, Katjietee	
Flowers long-tubed white to yellow with red markings, early summer, sow autumn, easily cultivated.	250-500mm
<b>Gladiolus aureus</b>	Iridaceae
Golden gladiolus	
Deciduous, winter-growing, flowers pale yellow to golden yellow, spring, sow autumn.	500-600mm
Peninsula endemic, endangered.	
<b>Gladiolus carinatus</b>	Iridaceae
Blou afrikaner	
Flowers in shades of blue to pink with yellow markings, winter flowering, dormant in summer, plant in pots, sow autumn.	300mm
<b>Gladiolus carmineus</b>	Iridaceae
Large deep pink flowers in autumn, dormant in summer, sow in autumn.	350mm
<b>Gladiolus carneus</b>	Iridaceae
Painted lady, Bergpypie	
Pale pink flowers with red markings, spring to summer, dormant in summer, needs moist conditions, suitable for pot culture, sow autumn.	
<b>Gladiolus caryophyllaceus</b>	Iridaceae
Pink afrikaner, Sandveldlelie	
Velvety leaves, large, strongly scented pink to mauve flowers in spring, sow autumn.	180-750mm
<b>Gladiolus dalenii</b>	Iridaceae
Rhodesian gladiolus	
Deciduous, summer-growing, flowers green, brown, orange, yellow or red, summer, fairly hardy, suited to garden culture, good cutflower, sow spring.	600-1500mm
<b>Gladiolus debilis var. cochleatus</b>	Iridaceae
White flowers with red markings, dormant in summer, needs acid sandy soil, sow in autumn.	300 - 400 mm

<b>Gladiolus elliotii</b>	Iridaceae
Whitish flowers with purple speckles in summer, dormant in winter, sow in spring.	0.8m
<b>Gladiolus equitans</b>	Iridaceae
Namakwalandkalkoentjie	
Deciduous, winter-growing, flowers orange, brick red or vermillion, lower petals yellow to lime green with reddish tips, scented, during spring, distinctive broad grey-green leaves with brown-red margins, tender to half hardy, sow autumn.	150-450mm
<b>Gladiolus floribundus</b>	Iridaceae
Deciduous, winter-growing, flowers white or pink and white, curled, undulating petal margins, spring flowering, sow autumn.	150 - 550mm
<b>Gladiolus floribundus subsp. miniatus</b>	Iridaceae
Deciduous, winter-growing, large salmon-pink to orange flowers, spring flowering, sow autumn.	150 - 550mm
<b>Gladiolus gracilis</b>	Iridaceae
Sandpypie	
Common, flowers blue-mauve, weakly scented, 500 mm winter-spring, easy to cultivate, sow in autumn.	
<b>Gladiolus gracilis var. latifolius</b>	Iridaceae
Sandpypie	
Robust, deciduous, winter-growing, scented pale blue,mauve-blue or pale pink flowers in late winter to spring, sow autumn.	200-750mm
<b>Gladiolus huttonii</b>	Iridaceae
Bright orange flowers in spring, good cut flower, dormant in summer, sow in autumn.	300-400mm
<b>Gladiolus liliaceus</b>	Iridaceae
Brown afrikaner, Kaneelaandblom	
Deciduous, winter-growing, flowers large strongly fragrant at night, yellowish flecked with brown to pinkish brown, with purplish streaks, spring, sow autumn.	300-800mm

<b>Gladiolus liliaceus hybrid</b>	Iridaceae
Deciduous, winter-growing, flowers large strongly fragrant at night, yellowish flecked with brown to pinkish brown, spring flowering, sow autumn.	300-800mm
<b>Gladiolus papilio</b>	Iridaceae
Greenish-brown flowers in summer, dormant in winter. Sow in spring.	0.8-1m
<b>Gladiolus priorii</b>	Iridaceae
Red afrikaner, Rooipypie	
Deciduous, winter-growing, flowers bright red to reddish-pink with a yellowish throat, autumn-winter, sow autumn.	300-800mm
<b>Gladiolus pritzelii</b>	Iridaceae
Yellow flowers during spring. Sow in autumn.	500 mm
<b>Gladiolus quadrangularis</b>	Iridaceae
Pink to red flowers in spring, dormant in summer, sow in autumn.	500-900mm
<b>Gladiolus quadrangulus</b>	Iridaceae
Star-shaped white flowers with purple markings, spring-flowering, moist conditions, suitable for pots, endangered, sow autumn.	500 mm
<b>Gladiolus rogersii</b>	Iridaceae
Riversdale bluebell, Blouklokkie	
Deciduous, winter growing, flowers pale to deep blue, mauve or purple, spring, sow autumn.	300-600mm
<b>Gladiolus saccatus</b>	Iridaceae
Bright red flowers in winter or spring, dormant in summer, grow in the rockery, sow autumn.	0.4 - 1 m
<b>Gladiolus scullyi</b>	Iridaceae
Mauve or yellowish-grey scented flowers in spring, sow autumn.	300 mm
<b>Gladiolus stefaniae</b>	Iridaceae
Beautiful large red blooms with white markings in autumn, dormant summer, semi-shade or sun in pots, sow autumn.	250-400mm

<b>Gladiolus tenellus</b>	Iridaceae
Fragrant yellow flowers in spring, grow in pots, sow in autumn.	600 mm
<b>Gladiolus tristis</b>	Iridaceae
Flowers yellow with darker speckles, strongly night-scented, spring-flowering, sow in autumn.	300 - 600 mm
<b>Gladiolus watermeyeri</b>	Iridaceae
Ribbed leaves, flowers cream to grey with purple veins and green and orange markings, in spring, fragrant, sow autumn.	100 - 300 mm
<b>Gladiolus watsonius</b>	Iridaceae
Red afrikaner, Suikerkan	
Deciduous, winter-growing, flowers deep red to orange red with yellow throat, spring, sow autumn.	0.4 - 1m
<b>Gloriosa superba</b>	Colchicaceae
Flame lily	
Climber, deciduous, summer growing, flowers yellow, orange, scarlet, purple or bi-coloured, in summer, sow spring.	0.4 - 1.5 m
<b>Haemanthus albiflos</b>	Amaryllidaceae
Paintbrush, Poeierkwas	
Summer growing, shade loving species with white flowers in summer. Sow seed as soon as ripe.	
<b>Haemanthus coccineus</b>	Amaryllidaceae
A large bulbous plant which produces big strap-like leaves in winter and goes dormant in summer. A succulent flowering spike is produced in late summer tipped with a scarlet paintbrush shaped flower-head. It grows well in full sun or shady areas.	
<b>Haemanthus deformis</b>	Amaryllidaceae
Congested inflorescence of white flowers with conspicuous yellow anthers, two large flat leaves, flowers in autumn, evergreen, likes partial shade. Sow seed as soon as right.	100-150mm

## **Haemanthus montanus**

Amaryllidaceae

Rabbits ears

An unusual bulbous plant with a solitary strap-shaped leaf. Narrow, trumpet shaped inflorescence is snow-white with protruding stamens, from Autumn to Winter. Ripe fruits are orange. Plant in partially shaded position. Sow seed as soon as ripe.

## **Haemanthus pubescens**

Amaryllidaceae

300mm

A showy winter growing species from the west coast. Dark green leaves often covered in white hairs. Large red spathes surround the umbel of crimson flowers. Fruits pale pinkish-white. The plant is summer dormant and autumn flowering. Sow as soon as ripe.

## **Haemanthus sanguineus**

Amaryllidaceae

April fool, Velskoenblaar

Bright orange flowerheads in autumn, followed by two very broad, flat leathery leaves in winter, suitable for the rockery, dormant in summer. Sow as soon as seed is ripe.

200 - 400 mm

## **Hesperantha bachmannii**

Iridaceae

Scented white flowers in spring, dormant in summer, sow in autumn.

150-300mm

## **Hesperantha cucullata**

Iridaceae

Flowers white with red markings, flowers in spring, opens late afternoon, sow in autumn.

400 mm

## **Hesperantha erecta**

Iridaceae

White star-shaped flowers in winter, very floriferous, dormant in summer, grow in pots, sow in autumn.

200 mm

## **Hesperantha falcata**

Iridaceae

Small white flowers in spring, dormant in summer, sow in autumn.

200-250mm

## **Hesperantha vaginata**

Iridaceae

Deciduous, winter growing, large bright yellow flowers with black markings in spring, very striking, sow autumn.

250 mm

<b>Homeria collina</b>	Iridaceae
Yellow tulip, Geeltulp	
Scented yellow flowers in spring, dormant in summer, grow in the rockery, sow in autumn.	500 mm
<b>Homeria comptonii</b>	Iridaceae
Cape tulip, Rooigeeltulp	
Large orange flowers with yellow centre, in spring, dormant in summer, suitable for pot culture, sow in autumn.	350 mm
<b>Homeria elegans</b>	Iridaceae
Peacock flower, Poublom, Tulp	
Deciduous, winter growing, flowers brilliant yellow, or outer tepals orange with green blotches, spring, sow autumn, threatened by agriculture.	150-300mm
<b>Homeria ochroleuca</b>	Iridaceae
Apricot tulip	
Deciduous, winter growing, yellow to orange flowers during spring, requires protection in very cold climates, sow in autumn.	750 mm
<b>Hypoxis hemerocallidea</b>	Hypoxidaceae
Star flower	
Recurved leaves, stary yellow flowers in spring and summer, hardy, dormant in winter, sow in spring, good in sunny rockeries.	500 mm
<b>Hypoxis iridifolia</b>	Hypoxidaceae
Yellow star-shaped flowers in summer, evergreen, needs full sun, sow in spring.	100mm
<b>Hypoxis rigidula var. pilosissima</b>	Hypoxidaceae
Evergreen, leaves with silky hairs, yellow flowers in spring, sow in spring.	500 mm
<b>Hypoxis villosa</b>	Hypoxidaceae
Small yellow flowers in spring and summer, evergreen, sow in spring.	50-100mm
<b>Ixia campanulata</b>	Iridaceae
Bright red flowers in spring, dormant in summer, sow in autumn.	150-200mm

<b><i>Ixia conferta</i> var. <i>ochroleuca</i></b>	Iridaceae
Kalossie	
Deciduous, winter-growing, flowers large cream or pale yellow with a dark centre, spring flowering, sow autumn.	150-350mm
<b><i>Ixia curta</i></b>	Iridaceae
Bright golden yellow flowers in spring, dormant in summer, grow in pots or rockery, sow in autumn.	400 mm
<b><i>Ixia dubia</i></b>	Iridaceae
Deciduous, winter-growing, flowers orange or golden-yellow, spring, sow autumn.	250-600mm
<b><i>Ixia flexuosa</i></b>	Iridaceae
Koringblommetjie	
Dainty pink, mauve or white flowers in spring, dormant in summer, sow in autumn.	350-650mm
<b><i>Ixia frederickii</i></b>	Iridaceae
Large bright orange flowers with dark centres, in spring, dormant in summer, grow in pots or rockery, sow autumn.	400mm
<b><i>Ixia maculata</i></b>	Iridaceae
Geelkalossie	
Deciduous, winter-growing, flowers large yellow to orange with a dark star-like centre, spring, sow autumn.	200-500 mm
<b><i>Ixia patens</i></b>	Iridaceae
Flower red, pink or white with a pale or dark centre, spring flowering, sow autumn.	200-500mm
<b><i>Ixia polystachya</i></b>	Iridaceae
Koringblommetjie	
Beautiful white flowers with greenish-blue centres in late spring, likes partial shade, dormant in summer. Sow in autumn.	0.6 - 1 m

<b>Ixia rapunculoides</b>	Iridaceae
Deciduous, winter-growing, flowers pale blue or mauve,in spring, sow in autumn.	250-550mm
<b>Ixia viridiflora</b>	Iridaceae
Green ixia, Groenkalossie	
Spectacular turquoise-green flowers with deep purple centres, spring-flowering, rare, sow in autumn.	500-950 mm
<b>Kniphofia baurii</b>	Asphodelaceae
Evergreen, flowers greenish-yellow, buds tinged with dull red, sow spring.	300 - 700 mm
<b>Kniphofia garden hybrid</b>	Asphodelaceae
Evergreen, bright orange flowers during summer, full sun and moist conditions, recommended garden subject, sow in spring.	2 m
<b>Kniphofia laxiflora</b>	Asphodelaceae
Red-hot poker, Torch lily	
Evergreen, striking bright yellow flower spikes in autumn, long-lasting cut-flower, grow in large pots or the rockery, sow spring.	0.5 - 1 m
<b>Kniphofia linearifolia</b>	Asphodelaceae
Red hot poker	
A striking red flower that becomes yellow as it ages in the late summer. Sow in spring.	1.5m
<b>Kniphofia praecox</b>	Asphodelaceae
Red hot poker	
Red flowers turning yellow in midsummer, evergreen, likes full sun and moist conditions. Sow in spring.	1 - 2 m
<b>Kniphofia sarmentosa</b>	Asphodelaceae
A clump-forming perennial for full sun position.	1 m
Red-hot poker flowers that start red and fade to salmon or buff, June to October. Frost hardy. Water well in winter. Sow in autumn.	
<b>Kniphofia uvaria</b>	Asphodelaceae
Red-hot poker, Vuurpyl, Soldaat, Stinkaalwyn	

Evergreen, flowers orange-yellow to greenish-yellow, buds red-tinged to brilliant scarlet, sow spring. Likes full sun and moist conditions.	0.4 - 1.1 m
<b>Lachenalia aloides</b> Yellow and green flowers in spring, dormant in summer, sow in autumn.	Hyacinthaceae 80-150mm
<b>Lachenalia aloides var. aurea</b> Geelklipkalossie, Geelviooltjie Deciduous, winter-growing, golden yellow flowers in spring, sow autumn.	Hyacinthaceae 60-250mm
<b>Lachenalia aloides var. quadricolor</b> Vierkleurkalossie Flowers reddish-orange, yellow and green with purple-maroon tips, in spring, dormant in summer, multiplies rapidly, sow in autumn.	Hyacinthaceae 80-150mm
<b>Lachenalia arbuthnotiae</b> Deciduous, winter-growing, long lasting sweetly scented yellow flowers in spring, sow autumn.	Hyacinthaceae 180-400mm
<b>Lachenalia bachmannii</b> Flowers white with reddish purple markings, spring, sow autumn.	Hyacinthaceae 150 - 300mm
<b>Lachenalia bulbifera</b> Rooi naeltjie A showy winter growing species with orange or red flowers, good container plant, keep dry in summer, sow in autumn.	Hyacinthaceae
<b>Lachenalia capensis</b> Scented white flowers in late spring, dormant in summer, sow in autumn.	Hyacinthaceae 150mm
<b>Lachenalia contaminata</b> Wild hyacinth, Groenviooltjie Cream flowers in spring, good pot subject, dormant in summer, sow in autumn.	Hyacinthaceae 60-250 mm
<b>Lachenalia elegans</b> Flowers blue and mauve, spring to summer,	Hyacinthaceae 150-450 mm

sandy soil, sow autumn, good pot plant. Sow in autumn.

**Lachenalia fistulosa**

Heavily scented flowers in shades of cream, yellow, blue, lilac or violet, in spring, dormant in summer, sow in autumn.

Hyacinthaceae  
80-300 mm

**Lachenalia framesii**

Deciduous, winter growing, flowers greenish-yellow with purple or magenta tips, late winter, sow autumn.

Hyacinthaceae  
90-150mm

**Lachenalia liliflora**

White flowers with mauve tips, spring-flowering, dormant in summer, grow in pots, sow in autumn.

Hyacinthaceae  
100 - 200 mm

**Lachenalia liliflora hybrid**

Large white flowers with purple tips, spring-flowering, dormant in summer, grow in pots, sow in autumn.

Hyacinthaceae  
100 - 200 mm

**Lachenalia mathewsii**

Bright yellow flowers with green markings, spring, dormant in summer, excellent pot subject, endangered, sow in autumn.

Hyacinthaceae  
100 - 200 mm

**Lachenalia mutabilis**

Flowers pale mauve, winter-flowering, dormant in summer, sow in autumn.

Hyacinthaceae  
200 - 250 mm

**Lachenalia namaquensis**

Flowers blue at base shading to magenta, late spring, free-flowering, grow in pots, sow in autumn.

Hyacinthaceae  
80-230 mm

**Lachenalia namibiensis**

Dwarf, white flowers in spring, dormant in summer, ideal for pots, sow in autumn.

Hyacinthaceae  
50-100 mm.

**Lachenalia orchoides var. glaucina**

Wild hyacinth, Blouviooltjie

Flowers blue-purple, spring, sow autumn, occurs naturally only on eastern slopes of Table Mountain. Sow in autumn.

Hyacinthaceae  
120-250mm

<b>Lachenalia orchioides var. orchioides</b>	Hyacinthaceae
Wild hyacinth, Groenviooltjie	
Flowers variable: greenish-yellow to creamy yellow, scented, spring, sow autumn.	80-400mm
<b>Lachenalia orthopetala</b>	Hyacinthaceae
Attractive, flowers white with maroon markings, winter growing, keep dry in summer, good container plant, sow in autumn.	90-270 mm
<b>Lachenalia pallida</b>	Hyacinthaceae
Yellow flowers in spring, sow in autumn.	100 - 250 mm
<b>Lachenalia patula</b>	Hyacinthaceae
Dwarf species, large white flowers in spring, dormant in summer, sow in autumn.	50mm
<b>Lachenalia peersii</b>	Hyacinthaceae
Scented, white flowers in early summer, dormant in late summer, sow in autumn.	200 mm
<b>Lachenalia purpureo-caerulea</b>	Hyacinthaceae
Flowers blue tipped with purple, sow in autumn.	250 mm
<b>Lachenalia pustulata</b>	Hyacinthaceae
Flowers cream marked with blue or purple, in spring, dormant in summer, sow in autumn.	100-250mm
<b>Lachenalia reflexa</b>	Hyacinthaceae
Yellow flowers, early spring, two broad leaves, sow autumn.	60-150 mm
<b>Lachenalia rosea</b>	Hyacinthaceae
Attractive pink flowers, spring, sow autumn, good pot plant.	80 - 200 mm
<b>Lachenalia splendida</b>	Hyacinthaceae
Mauve flowers in winter, dormant in summer, sow in autumn.	100 - 250 mm
<b>Lachenalia trichophylla</b>	Hyacinthaceae
Single oval leaf, deep red underside, green above, covered with hairs, flowers underside pale pink, upper pale yellow, sow autumn.	100 mm

<b>Lachenalia unicolor</b>	Hyacinthaceae
Purple flowers, spring-flowering, dormant in summer, sow in autumn.	150 - 200 mm
<b>Lachenalia variegata</b>	Hyacinthaceae
Speckled green and yellow flowers in spring, dormant in summer, sow in autumn.	150-200mm
<b>Lachenalia violacea</b>	Hyacinthaceae
Flowers blue - green to purple, spring, sandy soils, sow autumn.	120 - 130 mm
<b>Lachenalia viridiflora</b>	Hyacinthaceae
Turquoise coloured flowers in early winter, dormant in summer, excellent pot subject, sow in autumn.	100-200mm
<b>Lapeirousia anceps</b>	Iridaceae
Small pink flowers in spring, dormant in summer, grow in deep pots, sow in autumn.	100 - 300 mm
<b>Lapeirousia azurea</b>	Iridaceae
Koringblommetjie	
Deciduous, winter-growing, flowers blue-violet marked with black or cream-yellow marked with purple, spring flowering, sow autumn.	50 - 200 mm
<b>Lapeirousia jacquinii</b>	Iridaceae
Deciduous, winter-growing, flowers purple with magenta markings, spring flowering, suitable for pot culture, sow in autumn.	100 mm
<b>Ledebouria socialis</b>	Hyacinthaceae
A shade-loving, easy to grow bulb with attractively marked leaves, sow in spring.	
<b>Littonia modesta</b>	Colchicaceae
Climbing christmas bell, Geelklokkie	
Deciduous, summer growing, yellow-orange bell-shaped pendulous flowers in mid summer, climbs with tendrils, tender to severe frost, sow spring.	0.8-1.8m

<b>Melasphaerula ramosa</b>	Iridaceae
Baardmannetje, bokbaardjie	
An attractive shade loving bulb with feathery flower spikes in spring, flowers white to cream. Sow in autumn.	500mm
<b>Moraea aristata</b>	Iridaceae
Blou-ooguintjie	
Large white flowers with blue centre, spring-flowering, very attractive, endangered species, cultivate in large pots, sow in autumn.	400 mm
<b>Moraea bipartita</b>	Iridaceae
Bloutulp	
Flowers pale blue or deep violet, spring, dormant in summer, sow in autumn.	0.8-1m
<b>Moraea fugax</b>	Iridaceae
Scented white and yellow flowers in spring, sow in autumn.	200 mm
<b>Moraea gigandra</b>	Iridaceae
Very large violet blue flowers with sea-blue markings, in spring, dormant in summer, sow in autumn, a striking species, multiplies rapidly.	200 - 300 mm
<b>Moraea insolens</b>	Iridaceae
Flowers bright orange or creamy yellow with dark brown markings, spring, dormant summer, sow autumn, exceptionally attractive, must have good drainage in cultivation.	200-350 mm
<b>Moraea loubseri</b>	Iridaceae
Spring-flowering, blue flowers with dark centre, pot culture, rare and endangered, sow in autumn.	400 mm
<b>Moraea macrocarpa</b>	Iridaceae
Small mauve flowers with yellow markings, in spring, dormant in summer, sow autumn.	100mm
<b>Moraea neglecta</b>	Iridaceae
Deciduous, winter growing, large bright yellow, heavily scented flowers, in spring, frost tender, sow autumn.	200-400mm

<b>Moraea neopavonia</b> Peacock flower, Poublorn Very attractive black spotted orange flowers, spring-flowering grow in pots, sow in autumn.	Iridaceae 600 mm
<b>Moraea spathulata</b> Evergreen, yellow flowers in summer, sow in spring.	Iridaceae 800 mm
<b>Moraea tripetala</b> Attractive blue flowers in spring, very narrow single leaf, suitable for the rockery, dormant in summer. Sow in autumn.	Iridaceae 300 - 400 mm
<b>Moraea villosa</b> Uiltjie Various shades of blue, yellow, orange and pink with rounded splashes of peacock-blue or green in centre, good for pots or window boxes, rare, sow autumn.	Iridaceae 400 mm
<b>Nerine filifolia</b> Evergreen, pink flowers in autumn, sow seed as soon as it is ripe.	Amaryllidaceae 400 mm
<b>Nerine masoniorum</b> Evergreen, small pink flowers in late summer, sow seed as soon as ripe.	Amaryllidaceae 200 mm
<b>Nerine sarniensis</b> Guemsey lily, Berglelie Red flowers in autumn, dormant in summer, sow seed as soon as ripe.	Amaryllidaceae 500 mm
<b>Nivenia corymbosa</b> A most unusual plant which has a woody base from which arise fans of flattened, pointed leaves. Older plants develop long wiry banded stems ending in leaf fans. The most beautiful dark blue flowers are produced in clusters in summer.	Iridaceae
<b>Onixotis triquetra</b> Vleibloemmetjie Deciduous, winter growing, pink and white star-shaped	Colchicaceae 200-500mm

flowers in spring, grow in pots and place in shallow ponds, sow in autumn.

### **Ornithogalum dubium**

Hyacinthaceae

Yellow chinkerinchee, Geeltjienkerientjee

Flowers orange, yellow or orange-red, spring-flowering, deciduous, winter-growing, a good cutflower, sow in autumn.

200mm

### **Ornithogalum longibracteatum**

Hyacinthaceae

Evergreen, greenish-white flowers in summer, bulb multiplies very rapidly, often grows above ground-level, sow spring.

800 mm

### **Ornithogalum suaveolens**

Hyacinthaceae

Geelvooitjie

Several narrow leaves, flowers yellow with green keels, spring to summer, sow autumn.

100-500mm

### **Ornithogalum tenuifolium subsp. tenuifolium**

Hyacinthaceae

Bosui

Flowers whitish with green keels, summer, sow in autumn.

100-600mm

### **Ornithogalum thyrsoides**

Hyacinthaceae

Chinkerinchee, Tjienkerientjee

Deciduous, winter-growing, white flowers in early summer, an excellent cut flower, sow in autumn.

200 - 500 mm

### **Romulea atrandra**

Iridaceae

Deciduous, summer dormant, bright pink flowers in winter to early spring, grow in pots or in rockery, sow in autumn.

100 - 300 mm

### **Romulea flava**

Iridaceae

Frutang

Deciduous, summer dormant, flowers yellow, cream or white sometimes blue, winter to spring, pot culture, sow autumn.

100 - 550 mm

### **Romulea monadelphica**

Iridaceae

Deciduous, winter growing, flowers striking deep claret-red with black blotches in the throat, sow in autumn.

120-140mm

<b>Romulea sabulosa</b>	Iridaceae
Flowers red marked with yellow and black, spring, sow autumn.	140 mm
<b>Romulea tabularis</b>	Iridaceae
Bright blue flowers in spring, dormant in summer, grow in pots or the rockery, sow autumn.	100 - 200 mm
<b>Scadoxus multiflorus subsp. katharinae</b>	Amaryllidaceae
A truly striking bulb with large spreading leaves held proud of the ground and large bright orange-red flower clusters at the end of 1-1.5 m long stems. This is a must in any shade garden where its beauty will always evoke comment. Sow as soon as ripe.	1.5 m
<b>Scadoxus puniceus</b>	Amaryllidaceae
Paintbrush	
Large orange flowerheads in spring, followed by attractive fleshy leaves, dormant in winter, suitable for the semi-shaded rockery or large tubs. Sow seed as soon as ripe.	0.3 - 1 m
<b>Schizostylis coccinea</b>	Iridaceae
Scarlet river lily	
A striking, bulbous plant, with strap-like leaves. Bears attractive scarlet or pink, star-shaped flowers in December and January. Grows next to streams and rivers. Frost hardy. Natural to the Witwatersrand. Sow in spring.	400 - 600 mm
<b>Scilla dracomontana (SYN: S. natalensis)</b>	Hyacinthaceae
Dwarf squill	
Curious bulb, with blue flower spikes in spring. Multiply rapidly to form large clumps. Dormant in winter. Plant in full sun. Drought and frost hardy. Sow in spring.	300 mm
<b>Scilla natalensis</b>	Hyacinthaceae
Blue squill, Bloubergletie	
Deciduous, summer growing, many small blue flowers in long inflorescence, in summer, ideal for the rockery, sow spring.	0.2 - 1 m

<b>Scilla nervosa</b>	Hyacinthaceae
Bluish flowers in spring, dark-veined leaves in summer, dormant in winter, sow in spring.	200 mm
<b>Sparaxis bulbifera</b>	Iridaceae
Fluweelblom	
Deciduous, summer dormant, star-like flowers cream with purplish markings, spring, sow autumn.	300 mm
<b>Sparaxis grandiflora</b>	Iridaceae
Flowers vary from white to red during spring, sow in autumn.	250 mm
<b>Sparaxis grandiflora subsp. acutiloba</b>	Iridaceae
Botterblom	
Large yellow flowers in spring, grow in rockery, dormant in summer, sow in autumn.	80 - 100 mm
<b>Sparaxis tricolor</b>	Iridaceae
Harlequin flower, Fluweeltjie	
Deciduous, winter-growing, flowers orange or salmon-pink with yellow centre marked with black, spring, very striking, sow autumn.	120-400mm
<b>Sparaxis variegata var. meterlerkampiae</b>	Iridaceae
Deciduous, winter-growing, summer dormant, purple and yellow flowers in spring, sow autumn.	
<b>Sparaxis villosa</b>	Iridaceae
Ferweelblom	
Flowers fragrant, yellow, white and mauve, in spring, sow in autumn.	120 - 350 mm
<b>Spiloxene canaliculata</b>	Hypoxidaceae
Geelsterretjie	
Deciduous, winter growing, flowers large star-like, orange-yellow with dark centre, spring flowering, sow in autumn.	350 mm
<b>Tritonia crocata</b>	Iridaceae
Mosselbaaikalkoentjie	
Bright orange or reddish orange flowers in late spring, dormant in summer, very attractive, sow in autumn.	300 mm

<b>Tritonia deusta</b>	Iridaceae
Orange flowers with darker markings in late spring, dormant in summer, sow in autumn.	150-200mm
<b>Tritonia mixed colours</b>	Iridaceae
Deciduous, winter growing, pink and red flowers mixed, spring flowering, sow autumn.	200 mm
<b>Tritonia securigera</b>	Iridaceae
Flowers orange or yellow, large calluses on lower tepals, spring, sow autumn.	150 - 400 mm
<b>Tritonia squalida</b>	Iridaceae
Pink flowers in late spring, dormant in summer, very attractive, sow in autumn.	150-200mm
<b>Tulbaghia capensis</b>	Alliaceae
Evergreen, brown to purplish flowers in autumn, winter or spring, sow in autumn.	150 - 300 mm
<b>Tulbaghia simmleri</b>	Alliaceae
Fragrant mauve flowers in spring, evergreen, good groundcover. Sow in spring.	300mm
<b>Tulbaghia violacea</b>	Alliaceae
Wild garlic, Wildeknoffel An evergreen plant with mauve flowers throughout the year, suitable as a ground cover, sow in spring.	
<b>Urginea epigea</b>	Hyacinthaceae
A curious plant with above ground bulb and tall inflorescence, with profusion of small green flowers. Full sun, well drained position. Dormant in winter. Sow in spring.	2 m
<b>Veltheimia bracteata</b>	Hyacinthaceae
Forest Lily, Sandui Deciduous, winter-growing bulb, dense raceme of pink flowers, spring, glossy bright green leaves, sow autumn, shade-loving, suitable for indoor culture.	250-600mm
<b>Wachendorfia brachyandra</b>	Haemodoraceae
Yellow flowers with dark markings, spring or summer, winter-growing, sow in autumn.	200 - 650 mm

## **Wachendorfia paniculata**

Haemodoraceae

Rooikanol, Spinnepokblom

Deciduous, dormant in summer, attractive pale yellow flowers in spring, sow in autumn.

200 - 700 mm

## **Wachendorfia parviflora**

Haemodoraceae

Dull yellow flowers in spring, dormant in summer, sow in autumn.

100 - 300 mm

## **Wachendorfia thyrsiflora**

Haemodoraceae

Rooikanol

Evergreen, sword-shaped pleated leaves, golden yellow flowers in tall spikes in early summer, likes swampy conditions, sow in autumn.

1 m

## **WATSONIAS AND THEIR CULTIVATION**

Watsonia is an ornamental South African genus belonging to the Iridaceae family. Watsonias are widespread throughout the country but their main area of concentration is in the south-western Cape.

There are 52 species in the genus and they range through winter and summer rainfall areas as deciduous or evergreen plants. The habitat varies from mountainous aspects to grassland, marshes and the rather arid conditions in the north-western Cape.

This spectacular group of plants claimed the interest of botanists and horticulturists alike as long ago as 1756 when they were first introduced into England.

Watsonias are tremendously rewarding horticulturally and can be easily propagated from seed or vegetatively.

species to be sown is deciduous or evergreen and whether it comes from the summer or winter rainfall regions.

Those coming from the winter and intermediate rainfall zones must be sown from April to June.

Those from the summer rainfall areas must be sown from October to December.

Plants raised from seed can flower as soon as 18 months after germination.

The seed should be sown at a depth of one and a half times their size in seed-trays, which must provide soil depth of at least 100 mm for root development. The soil mixture should consist of sand, compost and loam at a ratio of 2:2:1. Cover the seed evenly with dry sand and water thoroughly. Do not allow the soil to dry out. It is advisable to provide light shade and protection from rain. Germination will take place within 3-4 weeks.

## **PROPAGATION**

### **Seed**

It is important to know whether the

### **Winter and intermediate rainfall species**

Watering of seedlings should be reduced at the end of the growing season to

prevent the small corms from rotting. The leaves will die back and the plant becomes dormant, at which stage the soil can then be allowed to dry out completely before the corms are lifted in November. They should be stored in peat, which must be placed in a cool, dry situation. This prevents the drying out or rotting of the corms, which should be replanted in mid-March at a depth one and a half times their size, spaced 30 mm apart. It is important to lift the young corms after their first growing season and to replant them in order to provide sufficient space for the development of the individual corms.

### **Summer rainfall species**

Evergreen species must not be allowed to dry out, but must be watered moderately throughout the year. They should be transplanted in September. Deciduous species should be lifted in May and replanted in October.

### **Division**

It is not necessary to lift the corms each year. The taller species should be lifted, divided and replanted every 3 to 5 years. Division is simply the breaking up of the corm clusters and the removal of old corms. The corms develop after flowering, but some evergreen species multiply before flowering and can be divided after the second year. Corms of winter rainfall species should be divided in the autumn and those of the summer rainfall species, in September and October. Evergreen species must be replanted directly after division in October.

### **Care**

The dormant corms should be kept as dry as possible. Watering and inadequate drainage can kill them. Leaves of the deciduous species must be removed at ground level, but only when the plant is completely dormant. The leaves of the evergreen species often become unattractive, spoiling the plant's appearance. Leaf removal should be done just prior to new growth every two or three years and has no adverse effect.

Feeding should not be done before flowering, as it will encourage leaf growth and reduce the number of flowers. If it is applied after flowering, the nutrients will be used and stored in the new corms which produce the flowers for the next year. It is advisable to plant the smaller species in small groups and to lift them every year to prevent losses.

### **Pests and diseases**

Aphids, red spider and caterpillars may be the cause of damage, but can be controlled by regular use of insecticides such as Dursban, Omite and Karbaryl, respectively.

Brown and gladiolus rust can cause premature die-back, but can be controlled with bi-weekly applications of copper sprays or Dithane M45 with the addition of a spreader.

<b>Watsonia aletroides</b>	Iridaceae
Kanolpypie	
Deciduous, dormant in summer, red flowers in late spring, dwarf growth habit, ideal pot subject, sow in autumn.	700 mm
<b>Watsonia amabilis</b>	Iridaceae
Deciduous, pink flowers, October to November.	300 mm
Sow in autumn.	
<b>Watsonia angusta</b>	Iridaceae
Rooikanolpypie	
Evergreen, scarlet flowers in summer, prefers damp conditions, sow in autumn.	1 m
<b>Watsonia borbonica</b>	Iridaceae
Suurkanol	
Deciduous, dormant in summer, showy pink spikes in spring to early summer, multiplies rapidly, sow in autumn, excellent garden subject.	1 - 2 m
<b>Watsonia borbonica subsp. ardernei</b>	Iridaceae
Witkanol	
Deciduous, dormant in summer, showy white flowers in spring to early summer, sow autumn, excellent garden subject.	1 - 2 m
<b>Watsonia borbonica subsp. borbonica</b>	Iridaceae
Sturdy dark pink spikes in spring and early summer, multiplies rapidly, dormant in summer. Sow in autumn.	1 - 2 m
<b>Watsonia coccinea</b>	Iridaceae
Deciduous, dormant in summer, bright orange, red or pink flowers in spring, sow in autumn.	100 - 300 mm
<b>Watsonia fourcadei</b>	Iridaceae
Suurkanol	
Evergreen, very striking pink flowers in autumn, moist conditions, sow in spring.	1-2m
<b>Watsonia fulgens</b>	Iridaceae
Long tubular flowers, orange or red, in spring, grows well in moist conditions, sow in spring.	1 - 1.3 m

<b>Watsonia humilis</b>	Iridaceae
Deciduous, summer dormant, cream flowers in late spring, very attractive, grow in deep pots or in a rockery, sow autumn.	300 - 450 mm
<b>Watsonia hysteronantha</b>	Iridaceae
Beautiful orange-red flowers in autumn (March to July), followed by narrow, leathery leaves, needs full sun, suited to the rockery, dormant in summer. Sow in autumn.	400 - 600 mm
<b>Watsonia knysnana</b>	Iridaceae
Evergreen, flowers pink November to January. Sow spring.	in 1.6 m
<b>Watsonia laccata</b>	Iridaceae
Deciduous, summer dormant, a dwarf species, orange or pink flowers in spring, sow in autumn.	400 - 600 mm
<b>Watsonia marginata</b>	Iridaceae
Kanolpypie Deciduous, summer dormant, flowers mauve or white, in late spring, sow in autumn.	1 - 2 m
<b>Watsonia marginata 'Star Spike'</b>	Iridaceae
Kanolpypie Deciduous, summer dormant, flowers white, in late spring, sow in autumn.	1 - 2 m
<b>Watsonia meriana</b>	Iridaceae
Lakpypie Deciduous, summer dormant, pink flowers in spring, recommended, sow in autumn.	1 m
<b>Watsonia pillansii</b>	Iridaceae
Evergreen, orange or scarlet flowers in summer, recommended, sow in spring, prefers damp conditions all year.	1 m
<b>Watsonia schlechteri</b>	Iridaceae
Deciduous, red flowers, November to February. Sow in autumn.	1 m

<b>Watsonia spectabilis</b>	Iridaceae
Deciduous, red flowers, August to October. Sow in autumn.	0.50 m
<b>Watsonia stenosiphon</b>	Iridaceae
Deciduous, orange flowers, September to October. Sow in autumn.	0.45 m
<b>Watsonia strictiflora</b>	Iridaceae
Deciduous, pink flowers, November to December. Sow in autumn.	0.40 m
<b>Watsonia tabularis</b>	Iridaceae
Evergreen, flowers in shades of orange or pink, in summer, recommended, sow in autumn.	1 - 1.5 m
<b>Watsonia vanderspuyiae</b>	Iridaceae
Deciduous, winter growing, summer dormant, very robust, broad leaves, dark red flowers in spring and early summer, sow autumn.	1 - 2 m
<b>Watsonia versfeldii</b>	Iridaceae
Deciduous, summer dormant, sturdy dark pink spikes in spring to early summer, multiplies rapidly, sow in autumn.	1 - 2 m
<b>Watsonia wordsworthiana</b>	Iridaceae
Deciduous, summer dormant, bright pink flowers in spring, sow in autumn.	1.5-2m
<b>Zantedeschia aethiopica</b>	Araceae
Arum lily, Aronskelk	
Creamy white spathes in winter and spring, moisture-loving, in sun or shade, dormant in summer, good cut flower, sow in autumn.	1m
<b>Zantedeschia aethiopica "Green Goddess"</b>	Araceae
Green arum	
A fast-growing plant, which likes moist conditions. Large green flowers are borne on long stems in spring and midsummer. Plant it near a pond and in partial shade, and water well. Sow in autumn.	

### **Zantedeschia aethiopica (speckled leaves)**

Araceae

This form has large fleshy green leaves with white speckles. White arum flowers. Grows well in damp shade or semi-shady areas. Sow in spring.

### **Zantedeschia albo-maculata 'Helen O'Connor'**

Araceae

Orange flowers with a dark centre in summer, spotted leaves, sun or semi-shade, dormant in winter. Sow in spring.

600 mm

### **Zantedeschia albomaculata**

Araceae

Kleinvarkblom

White flowers in summer, likes sun, dormant in winter, needs rich soil and liberal watering in summer. Sow in spring.

### **Zantedeschia jucunda**

Araceae

Pink arum

Beautiful bulbous plant with pink arum lily flowers in summer. Requires full sun and ample water. Keep dry during winter when dormant. Good pot plant. Sow in spring.



Jeanette Loedolff



## GROWING CLIMBERS

Climbers are rapid growing plants which cannot support their own weight. Most climbers are from the dense, wooded and forested, eastern parts of South Africa and belong to a wide range of families.

To support the stem and allow the climber to climb, some climbers have tendrils or modified parts (stipules or bracts) supporting the stem, while others twine or simply lean on other plants.

Due to their strong climbing nature climbers are useful in covering unsightly corners and excellent for pergolas and fences. Because of their rapid growth rate they also need regular trimming.

Many climbers have striking flowers such as the yellow canary creeper (*Senecio tamoides*) or the pink Port-st-Johns creeper (*Podranea ricasoliana*).

Climbers are generally easily propagated by seed or cuttings. They can also be containerised but are voracious feeders. When planting provide sufficient nourishment such as bone-meal and compost and water well. Provide support for the first season until well established.

# Climbers

## **Behnia reticulata**

Luzuriagaceae

Evergreen, attractive foliage plant, insignificant green flowers, semi-shade

## **Clematis brachiata**

Ranunculaceae

Travellers joy

Fast growing, deciduous climber, decorative, fragrant creamy flowers, feathery seedheads, prune back in winter, sow spring or autumn

## **Clematis x Clematopsis**

Ranunculaceae

A small evergreen creeper with attractive mauve scented flowers, prune back in late winter.

## **Combretum bracteosum**

Combretaceae

Hiccup nut, Hikklimop

Shrub with a tendency to scramble, flowers deep orange to scarlet.

## **Combretum microphyllum**

Combretaceae

Flame combretum, Vlamklimop

Vigorous climber or scrambling shrub, leaves glossy dark green; showy crimson-red flowers in early summer, in curving sprays, sow spring.

3-4m

## **Dalbergia armata**

Fabaceae

Thorny rope, Doringtou

Woody climber or shrub, strong spines, leaves acacia-like, heads of small cream 'pea' flowers, sweetly scented, summer, sow spring.

## **Dalbergia obovata**

Fabaceae

Climbing flat-bean, Rankplatboontjie

Woody climber or small tree, grey bark, compound leaves dark green above pale green below, small white fragrant flowers, early summer.

2-6m

## **Ipomoea albivenia**

Convolvulaceae

White-veined Ipomoea

A perennial climber with wiry stems. Flowers are large, white and funnel shaped. Flowering time is

January to March. Plant in full sun in well drained soil. Keep dry in winter.

### **Jasminum angulare**

Oleaceae

Creeper or rambling shrub, white fragrant flowers in summer, Eastern Cape to Mpumalanga. Full sun to light shade.

### **Jasminum breviflorum**

Oleaceae

Wild jasmine, Wildejasmyne

An elegant sweet smelling white flowered creeper, suitable for a corner or large container, full sun or half shade.

### **Jasminum multipartitum (climber)**

Oleaceae

A climbing form of this species with dark green leaves and large white flowers with a pink reverse. Summer flowering. Full sun to light shade.

### **Jasminum stenolobum**

Oleaceae

Wild jasmine, Wildejasmyne

An evergreen, semi hardy shrub or climber. Masses of large white star-shaped fragrant flowers in spring. Plant in well drained, compost-enriched soil. Prune to keep in a neat shape.

### **Podranea ricasoliana**

Bignoniaceae

Port St Johns creeper

Vigorous climber, glossy deep green leaves, showy pink trumpet-shaped flowers in bunches during summer, sow spring or autumn.

6m

### **Rhoicissus digitata**

Vitaceae

Baboon grape, Bobbejaandruif

An attractive hardy creeper with shiny three-lobed leaves. Grows well on fences or as a groundcover in full sun. Good in a container. Berries attract birds.

### **Rhoicissus rhomboidea**

Vitaceae

Evergreen creeper for containers or wall.

### **Rhoicissus tomentosa**

Vitaceae

Wild grape, Bosdruif

Fast growing climber, evergreen, attractive foliage, edible fruit, May to June.

### **Rhoicissus tridentata**

Vitaceae

Bitter grape, Bitterdruif

Usually a tendril climber, sometimes a bushy shrub,  
3-foliated, spherical fleshy fruits.

2-4 m

### **Senecio macroglossus**

Asteraceae

Flowering ivy

A fast growing creeper with large yellow daisy flowers  
and glossy ivy-like foliage. Plant in shade. Good  
container plant. Can also be used as a ground  
cover in shady areas.

### **Senecio tamoides**

Asteraceae

Canary creeper

Vigorous climber, semi-succulent leaves and stems,  
masses of canary yellow flowers in large showy  
heads, late summer, requires support, sunny  
position.

### **Thunbergia alata**

Acanthaceae

Black-eyed Susan

A light fast-growing creeper that is ideal for quickly  
covering a fence or embankment. Wide range of  
flower colour.





Catherine Hanforth

## GROWING CYCADS

### PROPAGATION

One of the main objections for not removing cycads from their natural habitat is that removal causes the destruction of viable plant communities and loss of seed production. Plants removed from natural habitats cannot reproduce naturally in gardens. These plants can be made productive by making use of artificial pollination.

### Collection of pollen

Regular visits to the male plants are necessary to note the date on which a cone appears. In this way it is possible to estimate when the cone will be ready for harvesting.

Initially the scales are arranged closely together. However, when the cone reaches maturity, the central axis lengthens and the scales move apart to make room for the release of the pollen.

The pollen sacs burst open and the pollen is released. The release of pollen lasts for about 18 days. Pollination usually takes place with the aid of the wind or insects. At the first sign of pollen being shed, the male cone is cut off at the base of the axis after first covering the cone with a plastic bag to prevent losing any pollen.

The cone is placed on a piece of smooth paper (not newspaper) and left until all pollen sacs have burst open. A room with no draught is essential as any wind will blow the pollen away.

Being heavy, the pollen will settle on the paper. Pass the pollen through a fine sieve to remove impurities and place in a sterilized jar. The lid should be completely sealed and airtight to prevent moisture from reaching the pollen. A sachet of silica gel may be placed in the jar to absorb excess moisture. The pollen is stored at a temperature of approximately 4 °C or in a deep freeze. Pollen stored in this way has been used successfully for more than a year.

### **Pollination of the female cone**

As in the case of the male cone, the appearance of the cones on the female plant should be noted in order to establish when the cone will be ready to receive pollen. However, frequent visits are necessary when the receptive period approaches as this period only last three to five days.

The scales of the female cone are also compressed initially. When the cone reaches maturity, the central axis lengthens, especially the top half. The scales move about 2 to 3 mm away from one another. This opening is adequate for the pollen to enter the cone.

In nature the pollen is transported by wind or insects, through the openings between the scales of the female cone into the pollen ducts. After about 3 to 5 days the scales close and no further pollination can take place. With artificial pollination, humans fulfil the function of the wind and insects. There are various methods of which a few are described

below. For the best results, pollinate the female cone as many times as is possible, regardless of the method. We use 1 teaspoon of pollen for each pollination.

### **METHOD 1**

By using a small teaspoon, disc or spatula, the pollen is placed in or in front of the openings between the scales of the cone. Use a small spray or syringe to blow the pollen into the cone, but be careful not to blow it away. With some force, blow the pollen down to the bottom of the cone. The pollen should be blown at all the visible openings. This process should be repeated daily until the scales close.

### **METHOD 2**

Pollination can also be done with the aid of water. Take a teaspoon of pollen and mix it with 200 ml of distilled water. Pour the mixture into the openings between the scales. Alternatively use a syringe with a narrow ridged tube attached to squirt the solution into the openings. Repeat either process daily until the scales on the cone close.

### **METHOD 3**

Place a plastic bag over the female cone and tie at the base. Take a plastic syringe filled with pollen and puncture the bag. Blow the pollen into the bag from the top. Remove the bag after 15 minutes and repeat the process daily until the openings between the scales close.

### **METHOD 4**

About 8 days before the cones are ready for pollination, this method can be used. It is not practical with all species, as the

pollen ducts of the smaller cones are very narrow or are not visible before the receptive period. Larger species, such as *Encephalartos transvenosus*, *E. lebomboensis*, *E. villosus* and *E. ngoyanus*, are easy to pollinate using this method.

Take fine sand and wash thoroughly until it is completely clean. Place the clean sand in a flat receptacle and sterilize by baking in an oven at 400 °C until dry. Sift the sand with a very fine sieve (e.g. a tea-strainer) to remove all the larger granules. Place in a jar which has been sterilized and store for future use.

Take approximately three tablespoons or more of the sterilized sand, depending on the size of the cone. Mix thoroughly with a third of a teaspoon of pollen to every three tablespoons of sand. Cut away the sterile (non-seed-bearing) top scales of the cone to expose the pollen ducts. Pour the pollen and sand mixture into the opening and shake the cone to agitate and distribute the mixture into the ducts. Repeat until the ducts are completely full. Seal the opening with a tree sealer compound together with the removed scales.

### Propagation by suckers

Early spring is the best time to remove cycad suckers. Any sucker larger than a cricket ball can be removed. The larger the sucker, the greater the possibility of success. Before removing suckers from parent plants, prune off all their leaves to reduce transpiration (loss of water vapour through the leaves) and provide easy access to the sucker.

Open up around the base of the sucker to expose the roots and the point

where the sucker is joined to the parent plant. Wedge a spade between the sucker and the mother plant (if necessary) and carefully lever the sucker off the main stem. Allow the wound of the sucker and the parent plant to dry and dust with flowers of sulphur.

Before planting in a well drained soil, dust the wound with Seradix 3 to stimulate rooting. Keep moist. Once the sucker has produced leaves, regular feeding with Seagro or Chemicult is recommended once a fortnight in the summer months.

### Harvesting the seed

When the female cone is ripe, the scales start loosening from the top to release the seed and the whole cone gradually falls apart leaving only the central axis on the plant.

At the first sign of disintegration of the cone it should be removed from the plant, but not before as cones removed prematurely tend to rot. It sometimes happens that a cone does not open, especially with species such as *E. humilis*, *E. ngoyanus*, *E. lanatus* and *E. laevifolius*. In such cases the cones should be removed and opened.

### Fertility tests

After harvesting the seed can be tested by placing it in water. Infertile seeds float while the fertile seeds sink to the bottom. As the seed ages, more of the infertile seed will float.

To confirm fertility or infertility, seeds can also be tested by cutting them in half length-wise. If seed is fertile, a thin spiral with the embryo developing at the end will be visible in the middle of the endosperm. This test should be

conducted just before sowing to allow sufficient time for the embryo to develop.

From the time of harvesting the seed the embryo continues to develop, and requires approximately nine months to develop to the stage when it is ready to germinate.

### **Cleaning the seed**

The flesh covering the seed is believed to contain carcinogens and the following precautions are recommended:

1. Handle seeds in a well-ventilated room or outdoors.
2. Wear facemasks and rubber gloves when handling seeds.

In nature the fleshy part of the seed is eaten by baboons, birds and rodents or it decays while lying in the leaf litter.

Animals and birds clean the seed and scatter it. Rodents also remove the seed and even eat the poisonous endosperm (core of the seed). In a garden the cycad enthusiast is responsible for the cleaning of the seed.

After harvesting, soak the seed in water until the flesh rubs off the kernel with ease. It may be necessary to use a knife or similar instrument to strip the flesh from the kernel. Wash the seed thoroughly in water to ensure that no flesh remains to promote fungal growth. Once completed, soak in a fungicide for 2 hours, then dry completely.

### **Storing the seed**

When dry, store the seed in a cool dry place. During storage it is important not to let the seeds dry out completely. Brown paper bags are ideal for storage at a temperature ranging between 4 and 20 °C. Check regularly for fungal infection as fungi can destroy the seed.

### **Sowing and germination**

Cycad seeds require moisture and warmth to stimulate germination (28 °C). The ideal sowing time is in the spring to early summer, nine months after harvesting. Before sowing, soak seed in a fungicide solution (e.g. Dithane) overnight and discard all floating seeds.

The conventional method of sowing is to place the seed in rows lying horizontally next to one another on a bed of clean river sand or in containers and pressed down level with the surface of the sand. The sand-bed is 80 mm deep with a heating cable installed to provide bottom-heat of 28 °C. A seed-tray can be heated by placing it in a black refuse bag which is closed and placed in the full sun. Inspect seed regularly, keep moist and remove germinating seeds (radicle becomes visible first) from the seedbed and plant in 2 l bags once the first leaf has appeared.

### **Cultivation of seedlings**

A well-drained soil mixture of equal parts river sand and compost is ideal. The germinating seeds are pressed partially into the mixture leaving two-thirds of the seed above the soil surface. Place seedlings in light shade and keep moist. Do not over water. Once seedlings show signs of growth, regular feeding with Chemicult every 2 weeks in summer will stimulate growth. Regular replanting into larger containers stimulates rapid growth as a restricted root run retards growth. A substantial plant can be grown from seed in 4 to 5 years by providing ideal conditions.

### **Pests**

South African cycads are colonised by

approximately 50 species of insects, but the majority of these should not be regarded as pests. In fact, there is growing evidence that several insects may be involved in cycad pollination.

Insects which could be regarded as pests of cultivated cycads include those which destroy or disfigure the leaves and which destroy the seeds.

Leaf damage is caused mainly by two types of caterpillar and a tiny gall midge. The most voracious caterpillar is the offspring of the leopard moth (*Zerenopsis leopardina*), an attractive orange moth with black spots on the wings that lays its eggs on the underside of the tender young leaves (often just as they emerge from the apex of the stem). The orange and black striped caterpillars congregate on the young leaves, often destroying the entire flush of new leaves. In some cases, the caterpillars may also feed on the older leaves, cones and even the stem.

A related species of caterpillar, known scientifically as *Calliorhatis abraxia* disfigures the older leaves by eating along the leaf margins. The caterpillars usually feed at night and are difficult to find during the day. This caterpillar seldom occurs in large enough numbers to cause substantial damage to the cycad plant.

Severe disfiguration of leaves is caused by the larvae of a type of fly called a gall midge (Cecidomyiidae). These minute orange-coloured larvae feed on the developing leaves, typically killing the leaf tissue on the inner margin of each leaflet. As the leaf develops, the dead tissue cannot grow so the leaflets become twisted and gnarled. In extreme cases, the leaves are completely

destroyed and have a burnt appearance.

Cycad leaves may also become infested with aphids, scale insects and mealy bug although these are seldom a major problem.

Seeds are destroyed by two snout beetles, *Antliarhinus zamiae* and *A. signatus*. Both beetles colonize the seeds at the time of pollination and emerge from the seeds when the cone disintegrates to shed its seed. Seeds which have been colonized by either beetle will be hollow and will float when placed in water. If the seeds are opened, between 10 and 80 beetles can be found within the seeds.

**CONTROL**

Most leaf-feeding insects can be controlled by using contact or systemic externally applied insecticides, but the gall midge can only be controlled effectively by applying a systemic insecticide. Seed-feeding insects can be controlled by spraying the female cones with a contact insecticide at the time of pollination. Seed-feeding insects should only be controlled if the cones are to be hand pollinated and if the seeds are going to be propagated since the beetles do not otherwise damage the plants.

Pest	Recommended insecticide
Aphids	Malathion, Pirimor
Scale insects	Malathion
Mealy bug	Malathion
Gall midge	Baythroid
Snout beetles	Ripcord

NB. Under no circumstances should insecticides be applied to plants in the wild as spraying eliminates insect pollinators.

## CULTIVATION

Cycads respond very well to cultivation provided they are grown in conditions that are similar to their natural habitat. For example *Encephalartos villosus* occurs in forests with mild winters and will therefore not be suited to regions where the winters are severe.

### Soil

Cycads are not particular about the type of soil they are grown in, but the better the quality of soil used, the better the results. However, regardless of the type of soil, the key factor for the successful growing of cycads is that the soil should be well drained at all times. Cycads can be grown successfully in clay soils, but adequate drainage must be provided. Adding gypsum and organic material will help to break down the clay and improve aeration. Sand is generally deficient in organic material, low in plant nutrients and dries out rapidly. To grow cycads in sandy soils it is essential to add organic material in the form of old manure and mature compost regularly as a mulch. This will greatly improve the nutrient content and help to retain moisture in the soil. Loamy soils are usually ideal for growing plants as they are fertile, well drained and do not dry out rapidly. A pH ranging from 7 to 8 is ideal for growing cycads.

### Planting

The same procedures apply to all plants when planting out a cycad from a container. Young cycads respond well to being planted out into the open ground, as they prefer a free root run. A generous size hole of 500 x 500 mm and deep should be prepared and a liberal

application of old mature or mature compost as well as 2 cups of bone meal mixed in thoroughly with the soil. Water the plant well and before removing it from the container, tie the leaves together to make handling a great deal easier. Place the cycad in the hole at the level just below that of the ground surrounding the hole and firm the soil down around the plant. Use the surplus soil to create a basin to retain water.

### Watering

South African cycads require rain ranging from 375 mm to 1 250 mm a year in nature. To grow these plants successfully it is important the water requirements of the various species in mind.

Cycads are considered able to withstand relatively long dry spells, but they do benefit from water on a regular basis. Plants that receive water regularly do not show signs of stress (e.g. yellowing and reduction in size of leaves) and appear healthy. They are also able to withstand stress far better when in good condition.

When watering, sufficient water should be applied to thoroughly soak the root area once a week during summer. There is no need to water the plants in winter. When operating automatic watering systems in gardens, it is essential to establish two watering regimes: one for the garden generally which would include most of the cycads, and the second for the cycads from more arid areas. The following cycads must be viewed as succulents and watered accordingly.

*Encephalartos cupidus*  
*E. eugene-maraisii*  
*E. friderici-guilielmi*

*E. horridus*  
*E. inopinus*  
*E. lanatus*  
*E. lehmannii*  
*E. princeps*  
*E. trispinosus*

Remember that good drainage is essential for the successful growing of cycads. Mulching around the plants with a 100 mm thick layer of compost or manure is very effective in retaining moisture in the soil and reducing weed development.

## Transplanting

The term transplanting refers to moving plants growing in the open ground from one position to another. Cycads transplant relatively easily. There are, however a number of exceptions that, as adult plants, do not transplant well. They are:

*Encephalartos cycadifolius*  
*E. ghellinckii*  
*E. lanatus*  
*E. paucidentatus*

The best time to transplant cycads is just before their growth cycle begins in early spring. The more care one takes when transplanting a cycad, the better the result will be. As much root as possible should be retained when excavating the plant.

The first stage of transplanting is to remove all of the leaves. This reduces the loss of moisture from the plant while recovering and reduces stress. This also allows easy access when digging a circular trench around the cycad and when moving the plant. The roots are severed with a sharp spade while digging the circular trench. If the plant is not planted immediately, the root ball needs

to be wrapped in hessian to prevent the roots from drying out. Mature plants can remain out of the soil for up to 6 months provided they are stored in the shade.

When transplanting, the following points need to be borne in mind:

- Transplant preferably during the rest period (winter to early spring).
- Remove all leaves to reduce the loss of moisture and for easier handling.
- Remove plant with as much root as possible.
- Prepare new site adding mature compost and old manure in the planting hole. Ensure good drainage.
- Plant at the same level as it was previously planted and water well.
- Water sparingly until new leaves appear. (This could take one year or more.)
- Very tall plants should be secured with stays until well rooted.

## Feeding

To maintain good quality plants and growth, it is essential to feed all cycads regularly. Although cycads are tolerant of neglect, with regular watering and feeding they develop into fine healthy specimens. These plants are long lived and have the reputation of being slow growing. Some are faster growing than others, but under optimum conditions, cycads will grow considerably faster than we usually expect them to.

A balanced inorganic fertilizer applied at the rate of 1 kg to a mature plant twice a year during the growing season is adequate to keep the plant in good condition. A mulch of well rotted compost or manure applied once a year around the base of the plant is also very beneficial .

# Cycads

## **Encephalartos altensteinii**

Zamiaceae

Eastern Cape cycad, Oos-Kaapse broodboom

Leaves to 3 m long, large cones.

2 - 3 m

## **Encephalartos caffer** Zamiaceae

Eastern Cape dwarf cycad

Short, thick subterranean stem with divided thick spiny blue-green leaves, suitable for well drained north facing sunny sites or rockeries, also suitable as a container plant, cones large, summer.

1m

## **Encephalartos cycadifolius**

Zamiaceae

Low growing branched cycad with grey foliage, cones in midsummer, frost hardy, dry Karoo and Highveld gardens or rockeries.

## **Encephalartos ferox**

Zamiaceae

Zululand cycad

Coastal bush of Natal and Mozambique, glossy dark green leaves, grows in shade of dune vegetation, easy to grow, requires abundant water and light shade, prefers warm areas.

1 m

## **Encephalartos friderici-guilielmi**

Zamiaceae

White-haired Cycad

Leaflets linear, entire, cones dense woolly, yellowish-grey to brownish in colour

4 m

## **Encephalartos ghellinckii**

Zamiaceae

Drakensberg cycad

Open grassland from Transkei, Cape and Natal Drakensberg, stems with woolly crown, new leaves woolly and grey, mature leaves bright green, completely frost-hardy, requires light shade with cool moist root run.

3m

## **Encephalartos horridus**

Zamiaceae

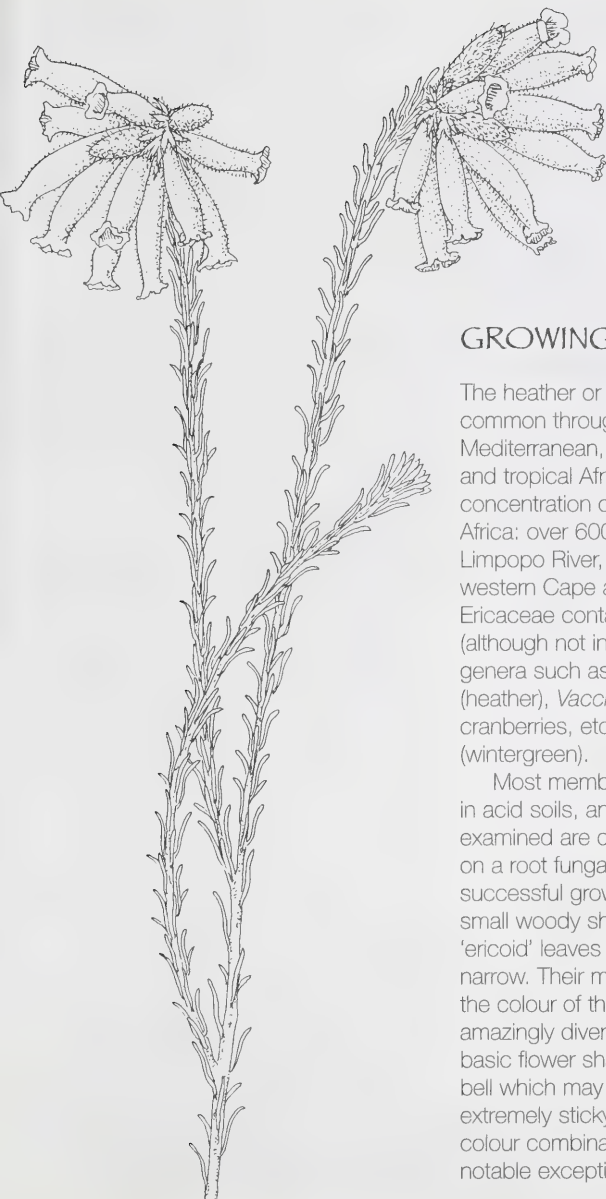
Eastern Cape blue cycad

Port Elizabeth, Uitenhage district, growing amongst Karoo scrub, glaucous blue leaves, suckers freely, cones brownish red, frost-hardy, responds well to cultivation in full sun, well-drained soil.

1m

<b>Encephalartos humilis</b>	Zamiaceae
Grassveld of eastern Transvaal, dwarf species, leaves dark green, responds well to cultivation, old leaves die off annually, requires cool root run.	300 mm,
<b>Encephalartos lanatus</b>	Zamiaceae
Olifantsrivier cycad	1m
Young leaves velvety becoming smooth with age, mature leaves soft green, 1 m long, leaflets with 2-3 large teeth on lower margin, cones dark green to bluish-green, requires hot well drained position, ideal container plant.	
<b>Encephalartos lebomboensis</b>	Zamiaceae
Lebombo cycad, Lebombobroodboom	4 m
Cliff faces in kloofs of Lebombo mountains with bright green leaves, responds well to cultivation in full sun, semi frost-hardy.	
<b>Encephalartos lehmannii</b>	Zamiaceae
Karoo cycad, Karoobroodboom	3 m
Sandstone hills amongs karoo scrub in eastern Cape, leaves glaucous blue turning green, easy to grow, very hardy, requires neutral to alkaline soils with full sun.	
<b>Encephalartos longifolius</b>	Zamiaceae
Suurberg cycad, Suurbergbroodboom	3 m
Thickset stem, leaflets dark green with grey bloom, cones brownish.	
<b>Encephalartos manikensis</b>	Zamiaceae
A small cycad (1.5 m), with suckers from base. Dark green glossy leaves (1-2 m). Can grow in sun or shade. Will tolerate light frost, but protect young plants from frost. A Kenyan species.	1.5 m
<b>Encephalartos natalensis</b>	Zamiaceae
Natal cycad, Natalbroodboom	4 m
Leaves up to 3,5 m long, cones dark green with covering of brownish wool.	
<b>Encephalartos paucidentatus</b>	Zamiaceae
Barberton cycad	

<p>A large cycad with erect trunk and graceful spreading crown. Leaves are bright green and glossy (1-2 m). Plant in shade. Do not disturb mature plants, slow to re-establish, paucidentatus= with few teeth, referring to the leaflets. Not frost hardy.</p>	6 m
<p><b>Encephalartos princeps</b></p>	Zamiaceae
<p>Kei cycad, Keibroodboom</p>	
<p>Dolerite cliffs of eastern Cape, leaves silvery blue, becoming dull green with age, very hardy, requires full sun and good drainage.</p>	4 m
<p><b>Encephalartos transvenosus</b></p>	Zamiaceae
<p>Modjadji cycad, Modjadjibroodboom</p>	
<p>Teeth along both margins of leaflets, massive female cones.</p>	5 - 8 m
<p><b>Encephalartos trispinosus</b></p>	Zamiaceae
<p>Bushmans River cycad</p>	
<p>Short, thick stemmed perennial, divided thick leathery spiny blue-green leaves up to 1m long, suitable for well drained north facing sunny sites or rockeries, also suitable as a container plant, cones large, during summer.</p>	1.5m
<p><b>Encephalartos umbeluziensis</b></p>	Zamiaceae
<p>Umbeluzi cycad</p>	
<p>A small cycad with green cones at maturity. Leaves are erect and spreading up to 1-2 m long. Best in shady position. Semi-hardy.</p>	300 mm
<p><b>Encephalartos villosus</b></p>	Zamiaceae
<p>Poor mans cycad</p>	
<p>East coast and inland forests, subterranean species with glossy dark green leaves up to 3 m long, very attractive foliage plant, easy to grow, requires shade, ample moisture and protection from frost.</p>	
<p><b>Stangeria eriopus</b></p>	Stangeriaceae
<p>Bobbejaankos</p>	
<p>Evergreen, leathery fern-like foliage, male or female cones at ground level, shady, protected position, related to cycads.</p>	1 m



## GROWING ERICAS

The heather or heath genus *Erica*, though common through much of Europe, the Mediterranean, the islands of the Atlantic and tropical Africa, has its highest concentration of species in southern Africa: over 600 species south of the Limpopo River, 580 of them in the south-western Cape alone. The family Ericaceae contains many well-known (although not indigenous to South Africa) genera such as *Rhododendron*, *Calluna* (heather), *Vaccinium* (blueberries, cranberries, etc.) and *Gaultheria* (wintergreen).

Most members of the family are found in acid soils, and all that have been examined are dependent to some extent on a root fungal mycorrhiza for successful growth. Ericas are usually small woody shrubs with characteristic 'ericoid' leaves which are small and narrow. Their most outstanding feature is the colour of the flowers and the amazingly diverse shape and size. The basic flower shape is an open or closed bell which may be waxy, smooth, hairy or extremely sticky. Virtually all colours and colour combinations are found, with the notable exception of blue.

Ericas abound in the Cape from Vanrhynsdorp in the north to the Cape Peninsula in the south and Port Elizabeth in the east, but are not found in the dry Karoo. Ericas colonize most habitats, which vary from coastal flat country, marshes and rivers, to mountain peaks where the rainfall is high and snow frequent, but the majority prefer the moist south-facing aspects of mountains to the dry north and west-facing slopes.

Ericas occur predominantly in acid sands derived from Table Mountain Sandstone, Bokkeveld shales and granite, although some do occur in the alkaline soils, but are all able to grow in acid soils too. A well drained acidic medium with a pH ranging from 4 to 5.5 is ideal for ericas. They have a hair-like root system (i.e. no taproot) which must not be disturbed by digging. Mulch, consisting of wood chips, pine needles or stones, gives protection, keeps the soil moist and suppresses weed growth.

## PROPAGATION

### Vegetative

Growing ericas from cuttings is faster than growing them from seed.

Vegetative propagation is done with mist and bottom heat and good air circulation is important as it makes the cuttings less susceptible to fungal infection. As a general rule, the time to take cuttings should be done approximately two months after flowering. At this stage the plants have grown 50-100 mm. Plants must be healthy and free from disease. The cuttings are taken from semi-hard wood, and should be 40-50 mm long. Heel cuttings are most suitable although nodal cuttings can also be used.

The leaves on the lower third of the cutting are removed. Rooting hormones can be applied with beneficial results. Rooting media vary considerably but the best results have been achieved with 50% peat or crushed pine bark and 50% polystyrene. Bottom heat is used and kept at a temperature of 22-24 °C. Once the cuttings are well-rooted, they are potted into half-litre plastic bags using a fynbos growing medium.

The young cuttings are watered well after potting and shaded lightly for a month. The bags are then placed in full sun. Care must be taken not to damage the fine root hairs when transplanting. Within 3-4 months the young cuttings are ready to be planted out.

### Seed

Seed should be harvested just as it starts to fall naturally. The old flowers containing the fruits should be dried and then rubbed through a sieve. The resultant mix may be winnowed to separate the seed from the trash. The seed is very fine and often sticky, as in the case of *E. aristata*, *E. jasminiflora*, *E. irbyana*.

The seed should be sown in autumn (April-May) in a seed-tray not less than 100 mm deep. The potting medium should be well drained and acidic, and firmed down to give a level surface. If this surface is not level, germination is not even. Prior to sowing, the seed-tray should be well watered with a fine rose.

Seed is then sown evenly over the whole surface of the seed-tray. Care must be taken to obtain an even distribution, thus minimizing the chances of damping-off. The seed can be mixed with fine sand to obtain better distribution. A fine layer of the sieved

growing medium can be placed over the sown seed, although this is not necessary. After sowing, a smoke treatment should be applied (see page 402). Water gently with a fine rose, and keep the seed-tray out of direct sunlight and rain in an area with good air circulation. Germination time varies from 1 to 2 months.

When the seedlings are approximately 10 mm tall, place them in the open, under light shading. During the period from October to December, they will have reached a height of 20-50 mm and will be ready for pricking, using a fynbos potting medium. As many of the fine hair-like roots as possible must remain on the plants. The seedlings should then be placed under light shade and watered well. Once established, shading is not required, with the exception of areas where the temperature exceeds 32 °C.

### Planting out

In preparing an area for planting, the first consideration must be drainage. This can be improved by applying sharp river sand and leaf-mould or composted milled bark prior to planting out. When planting

ericas, the distance apart depends on the species ( i.e. their height, spread and growth form). Planting must be done firmly and a mulch can be added afterwards. After flowering and seeding the plants should be pruned by shortening the growth of the previous year and removing all dead wood. Ericas can also be grown as pot plants and respond to feeding with a fish emulsion.

Pruning and good drainage are essential.

### Requirements

- Good drainage
- Sunlight
- Adequate water
- Good air circulation
- Slightly acidic soils

On the whole, ericas are social plants, but certain species grow on their own in the wild. They usually grow alongside members of the Restionaceae family (e.g. *Elegia* spp. *Chondropetalum* spp. *Thamnochortus* spp. *Restio* spp.). Other groups of plants are also suitable companion plants, like members of the Rutaceae and Proteaceae, as well as perennials such as *Helichrysum* spp.

## Ericas

### **Eremia totta**

Spreading grey shrublet, small white flowers from September to November.

Ericaceae  
100-300mm

### **Erica abietina**

Erect woody plants, large red tubular flowers almost all year, wet position.

Ericaceae  
800mm

### **Erica acuta**

Erect shrub, very fine leaves, masses of small dark mauve flowers, from spring to mid summer, sow

Ericaceae  
0.5-1.2m

autumn, plant in dense populations, can tolerate dry conditions.	
<b>Erica annectens</b>	Ericaceae
Large orange tubular flowers in late summer, floriferous.	1m
<b>Erica articularis</b>	Ericaceae
Shrub, small white, pink or purple flowers during summer, sow autumn.	300-500mm
<b>Erica axilliflora</b>	Ericaceae
Klokkiesheide	
Erect, deep pink flowers, January to September, coastal gardens.	500-600mm
<b>Erica baccans</b>	Ericaceae
Berryheath, Bessieheide	
Robust erect well branched shrub, dry urn-shaped bright pink flowers, winter and spring; sow autumn, well-drained areas, strong grower, good cut flower, full sun.	2 - 2.5m
<b>Erica banksia</b>	Ericaceae
Sprawling woody shrub forming a large clump; long tubular whitish, rosy pink or yellowish flowers hang down in clusters, from autumn till spring; sow in autumn; attractive shrub.	500-600mm
<b>Erica bauera</b>	Ericaceae
Albertinia heath, Bridal heath, Witheide	
Large shrub; grey-green leaves, masses of white or pink tubular flowers on long thin stems, in summer, sow in autumn, plant in groups.	1 - 15 m
<b>Erica bergiana</b>	Ericaceae
Shrub, small pink flowers, during summer, prefers damp conditions, sow autumn.	900mm
<b>Erica blandfordia</b>	Ericaceae
Upright to sprawling shrub, yellow flowers in summer, dry, rocky and well-drained areas, full sun to semi-shade, strong grower and good pot plant.	800 mm

<b>Erica bolusiae</b>	Ericaceae
Almost extinct from Cape Flats, small spreading shrub, small white flowers March to May.	500mm
<b>Erica borboniifolia</b>	Ericaceae
Erect shrub, dense masses of rose purple flowers, in late summer, showy species.	600mm
<b>Erica brachialis</b>	Ericaceae
Large sturdy woody shrub, bright green fading to yellow tubular flowers in summer, often on the bush all year, ideal for coastal gardens as it is resistant to salt spray, sow in autumn.	2m
<b>Erica bruniifolia</b>	Ericaceae
Small bushy shrub, tending to sprawl; large hanging flowerheads, flowers cream with brown stamens protruding, from mid winter to early summer; sow in autumn.	400-500mm
<b>Erica caffra</b>	Ericaceae
Water heath, Waterheide	
Large sturdy shrub or small tree, tubular white or yellowish scented flowers from mid winter to mid summer, strong grower, marshy areas.	2-4m
<b>Erica calycina</b>	Ericaceae
Rigid shrub, flowers calycine, white or pink, during summer, sow autumn.	600mm
<b>Erica canaliculata</b>	Ericaceae
Numerous small pink flowers at the tips of small branchlets between November and January. Prefer moist cool to half shade forest conditions.	2 m
<b>Erica capensis</b>	Ericaceae
Erect, small pink flowers, December to April, moist conditions.	500 mm
<b>Erica capitata</b>	Ericaceae
Silver heath, Silwerheide	
White to green flowers, summer, very rare plant.	300 mm

<b>Erica cerinthoides</b>	Ericaceae
Fire heath, Rooihaartjie	
Small shrublet with willowy branches, persistent rootstock, showy tubular hairy crimson red flowers in clusters at branches tips almost all year, best after a fire, sow in autumn.	0.2-1.2m
<b>Erica chloroloma</b>	Ericaceae
Slender woody plants, red and green tubular flowers in winter and spring, grows well at coast, sandy soil or limestone.	1.5 m
<b>Erica clavisekala</b>	Ericaceae
Rare and endangered. Shrublet to 300 mm, small red flowers, February to April, wet marshy conditions.	300 mm
<b>Erica coarctata</b>	Ericaceae
Erect, tiny red flowers, October to April, sandy limestone areas. Rare and endangered.	500 mm
<b>Erica coccinea</b>	Ericaceae
Small tassel heath	
Rigid stoutly branched shrub; tubular yellow to red flowers in closely packed spikes, often hanging down, anthers protruding, flowers throughout the year; sow in autumn.	1 - 1.2m
<b>Erica colorans</b>	Ericaceae
Erect, sparsely branched shrubs, for marshy, wet conditions, long white tubular flowers from August to October.	1 m
<b>Erica cruenta</b>	Ericaceae
Crimson heath, Rooiheide	
Upright laxly branched shrub; showy long-tubed blood-red flowers borne in clusters at the tips of branches from autumn to spring; rare.	0.8-1m
<b>Erica cubica</b>	Ericaceae
Pink flowers, attractive small shrub, summer, moist areas, showy open flowers, ideal pot plant.	300 mm

<b>Erica curviflora</b>	Ericaceae
Water heath, Waterbossie	
Upright to bushy shrub, attractive long, tubular soft red to orange flowers in winter/summer, grows in wet areas in semi-shade, strong grower, good pot plant.	800 mm
<b>Erica curvirostris</b>	Ericaceae
Heuningheide	
Rounded shrub; fragrant white or rosy pink bell-shaped flowers, from mid summer to autumn; good cut flower; sow in autumn.	300-900 mm
<b>Erica cyathiformis</b>	Ericaceae
Slender but densely covered shrublet, small deep-pink flowers from August to October.	300mm
<b>Erica cyrilliflora</b>	Ericaceae
Rare and endangered, upright, well-branched shrublet, masses of deep pink tubular flowers from January to February, moist conditions.	600mm
<b>Erica daphniflora</b>	Ericaceae
Shrub, urn-shaped flowers, white, yellow, pink or wine-red, during summer, sow autumn.	600mm
<b>Erica deflexa</b>	Ericaceae
Very floriferous, masses of small pale pink flowers on long spikes from December to March, plant in dense population.	500 mm
<b>Erica demissa</b>	Ericaceae
Shrublet, small white flowers during winter, sow autumn.	75-100mm
<b>Erica densifolia</b>	Ericaceae
Sticky red and green heathUpright well branched shrub; long tubular slightly sticky two-tone flowers, pink-red, occasionally white, with green tips, borne from spring to autumn; very showy; strong grower in well-drained areas, full sun to semi-shade.	1m
<b>Erica denticulata</b>	Ericaceae
Lekkerruikheide	

Shrublet, fragrant urn-shaped, waxy white, pink or yellow flowers, during summer, sow autumn.	450mm
<b>Erica dianthifolia</b> White flowers in spring and summer, damp acid soil	Ericaceae 500 mm
<b>Erica diaphana</b> Hangertjieheide Upright shrub; hanging tubular purplish pink flowers with a greenish tip, summer, stony, well-drained areas, sow autumn; strong grower, good pot plant, full sun.	Ericaceae 1 - 1.5 m
<b>Erica discolor</b> Dense woody shrub; flowers tubular white, red-yellow or pink, sow in autumn.	Ericaceae 1 - 1.8m
<b>Erica empetrina</b> Erect, pink flowers, September to December, rockeries.	Ericaceae 300-500 mm
<b>Erica ericoides</b> Compact woody shrub, pale pink honey-scented flowers, January to April.	Ericaceae 400 mm
<b>Erica esterhuyseniae</b> Upright, beautiful urn to bell-shaped flowers, white rosy pink, December to February.	Ericaceae to 400mm
<b>Erica fairii</b> A robust shrub, clusters of white flowers at the end of drooping branches, December to June.	Ericaceae 600mm
<b>Erica fascicularis</b> Volstruisheide Erect, pink tubular flowers, April to July, sandy areas.	Ericaceae 1.5-1.8m
<b>Erica ferrea</b> Rare and endangered in the Cape Flats. Few long spreading branches, small mauve flowers at tips from July to October, sandy conditions.	Ericaceae 1.2 m
<b>Erica flacca</b> Slender but dense sprawling shrublet, small pink flowers from August to September, moist conditions.	Ericaceae 300mm

<b>Erica floccifera</b>	Ericaceae
Erect shrublet, masses of small white flowers, September to October. Good cut flower subject.	700mm
<b>Erica foliacea</b>	Ericaceae
Shrub, flowers yellow-green to orange-yellow, during winter, sow autumn.	800-900mm
<b>Erica fontana</b>	Ericaceae
Rare, upright to spreading shrublet, white to pink flowers in summer, marshes.	1 m
<b>Erica formosa</b>	Ericaceae
White heath, Witheide	
Small bushy shrub, waxy white campanulate flowers borne in profusion from mid winter to summer, sow in autumn, good cut flower, very showy for garden or pots.	600mm
<b>Erica gallorum</b>	Ericaceae
Erect shrub, flowers campanulate, white or pink, during spring, rare, sow autumn.	500-600mm
<b>Erica georgica</b>	Ericaceae
Georgeheide	
Small shrublet, pale pink or white tubular flowers from November to February, prefers cool moist conditions.	300 mm
<b>Erica gilva</b>	Ericaceae
Groenheide	
Erect shrub; creamy to white or greenish yellow tubular flowers borne in summer; sow in autumn.	1m
<b>Erica glandulosa</b>	Ericaceae
Erect rounded shrub; tubular curved pink to orange flowers from autumn to spring; sow in autumn; strong grower.	500-700mm
<b>Erica glauca var. elegans</b>	Ericaceae
Cup-and-saucer heath, Kommetjiepieringheide	
Stout erect shrub, large calycine dark purple or pink flowers, summer, sow autumn. Suitable for rockeries, need good drainage.	0.5 - 2m

<b><i>Erica glauca</i> var. <i>glauca</i></b>	Ericaceae
Erect, large purple flowers, July to December, rockeries.	0.5-1.5m
<b><i>Erica glomiflora</i></b>	Ericaceae
Erect well branched shrub; white or pink flowers, from autumn till mid summer; sow in autumn; good cutflower; strong grower, good garden and pot subject.	800mm
<b><i>Erica gnaphaloides</i></b>	Ericaceae
Slender shrub, small pink flowers, mid-winter to mid-summer, sow autumn.	400mm
<b><i>Erica gracilis</i></b>	Ericaceae
Erect shrub; slender branches covered with small urn-shaped bright to rosy pink flowers from mid winter to mid summer; sow in autumn; strong grower, responds well to cultivation; beautiful pot plant, plant in large groups.	500-700mm
<b><i>Erica grandiflora</i></b>	Ericaceae
Robust shrub, large orange-red tubular flowers, mid-winter, sow autumn.	1.5m
<b><i>Erica grata</i></b>	Ericaceae
Erect or scrambling shrublet; small purple flowers in spring; sow in autumn.	350mm
<b><i>Erica haematocodon</i></b>	Ericaceae
Bushy, small dark red flowers, October to January, rockeries, RARE and ENDANGERED.	200 - 300 mm
<b><i>Erica halicacaba</i></b>	Ericaceae
Bladder heath	
Upright shrub, large inflated green to white flowers, spring to early summer, rare and endangered.	1 m
<b><i>Erica hebecalyx</i></b>	Ericaceae
Tall shrub, green to yellowish white or red and green sticky tubular flowers, from spring to late summer, sow in autumn, strong grower.	1 - 1.2 m

<b>Erica heleophila</b>	Ericaceae
Shrub, urn-shaped pink flowers, mid-summer, rare, sow autumn, prefers damp but well-drained conditions.	500mm
<b>Erica hirtiflora</b>	Ericaceae
Upright bushy shrub with lax branches, egg or urn-shaped bright pink to lilac flowers from spring to autumn, very floriferous, sow autumn, decorative shrub, good cut flower.	1-1.5 m
<b>Erica hispidula</b>	Ericaceae
Erect shrub, minute white, pink or red flowers, sow autumn.	1.8m
<b>Erica imbricata</b>	Ericaceae
Ker-ker	
Small upright floriferous shrub, small egg to urn-shaped white, pink, brown or red flowers with protruding stamens, winter to summer, sow autumn, suitable for coastal conditions.	500 - 800 mm
<b>Erica intonsa</b>	Ericaceae
An erect shrublet with pink urn-shaped flowers.	300mm
<b>Erica junonia</b>	Ericaceae
Low sprawling shrublet, large coral pink tubular flowers with spreading stellate lobes, mid-summer, very decorative, sow autumn.	200 mm
<b>Erica junonia var. minor</b>	Ericaceae
Shrublet, very similar to Erica junonia but corolla smaller and more inflated and bush does sprawl, coral pink flowers in mid summer, sow autumn.	300mm
<b>Erica laeta</b>	Ericaceae
Well branched shrub, clusters of numerous small urn-shaped bright pink to red flowers, during summer, sow in autumn.	300 - 400 mm
<b>Erica lanata</b>	Ericaceae
White woolly flowers in winter, moist conditions, clustered.	500 mm

<b>Erica lateralis</b>	Ericaceae
Button heath, Knopiesheide	
Upright spreading shrub, plumes of deep pink urn-shaped flowers in late summer, sow in autumn, decorative shrub, good cut flower.	500 mm
<b>Erica leptopus</b>	Ericaceae
Small, sparsely branched shrublet, small clusters of white flowers from November to January, prefers dry, sandy conditions.	400mm
<b>Erica leucantha</b>	Ericaceae
Small dense shrublet, clusters of small white flowers from December to January, prefers moist sandy conditions.	300 mm
<b>Erica leucotrachela</b>	Ericaceae
Erect well branched leafy shrub, two-toned dry tubular flowers - crimson base, pure velvety white tip, autumn to early summer, sow in autumn, good garden or pot subject.	1.5m
<b>Erica limosa</b>	Ericaceae
Rare and endangered. Matted marshy type, small creamy pink flowers from August to November.	
<b>Erica longifolia</b>	Ericaceae
Erect shrub; a variable species; tubular flowers ranging from white through yellow, green, pink, red and purple to brown and orange, even two tone, borne in summer; sow in autumn; full sun to semi-shade, strong grower.	900 mm
<b>Erica longimontana</b>	Ericaceae
Erect shrub with light pink flowers, showy, late summer, suitable for erica garden.	500mm
<b>Erica lucida</b>	Ericaceae
Tall upright shrub, rose pink or dull red bell to cup-shaped flowers giving a plume effect, in spring, sow in autumn.	0.6 - 1.5m

<b>Erica lutea</b>	Ericaceae 900mm
Upright shrub with lax branches; numerous tubular flowers with star shaped mouth, may be yellow or white, borne from late summer to early winter; sow in autumn.	
<b>Erica mammosa</b>	Ericaceae
Nine-pin heath, Rooiklossieheide	
A variable species. Large well-branched erect shrub, dark red, orange-red, pink, green, cream or white tubular flowers closely packed along branch tips, from mid summer to autumn, sow autumn, strong grower, very showy, full sun and well-drained.	1-1.8m
<b>Erica margaritacea</b>	Ericaceae 500mm
Rare and endangered. Erect shrublet, clusters of small white flowers from August to October, prefers sandy conditions.	
<b>Erica massonii</b>	Ericaceae 500 mm
Erect shrub, striking glossy vivid red tubular flowers with green tips, responds to pruning.	
<b>Erica mauritanica</b>	Ericaceae 1 m
Erect, dark mauve flowers, November to May, good cut flower, grows on damp coastal flats and mountain slopes.	
<b>Erica mollis</b>	Ericaceae 600mm
Shrub, urn-shaped pink pubescent flowers, mid summer, prefers damp but well-drained conditions, sow autumn.	
<b>Erica monadelpha</b>	Ericaceae 600-900mm
Small robust many-branched erect shrub with persistent rootstock; crimson-red sticky tubular flowers with protruding anthers, from mid summer till autumn; sow in autumn.	
<b>Erica nana</b>	Ericaceae 200 mm
Spreading shrub, spectacular show of bright yellow flowers in spring, well-drained but moist areas, good pot plant, strong grower, semi-shade to full sun, rare.	

<b>Erica nevillei</b>	Ericaceae
A scrambling shrublet, large tubular red-orange flowers.	300mm
<b>Erica nubigena</b>	Ericaceae
Small upright shrublet, sticky pinkish red flowers from December to February, suitable for rockeries	300mm
<b>Erica nudiflora</b>	Ericaceae
Very hairy, flowers numerous in long tapering inflorescences, bright red to pink.	200mm
<b>Erica oblongiflora</b>	Ericaceae
Upright but sprawling shrublet, greenish yellow flowers borne in umbels from April to July, suitable for limestone areas.	500mm
<b>Erica ostiaria</b>	Ericaceae
Very rare, erect, branched shrub, terminal clusters of pinkish-white flowers, March to April.	2 m
<b>Erica paludicola</b>	Ericaceae
Rare and endangered. Dense shrublet, small rose pink flowers from October to November, cool moist conditions.	200mm
<b>Erica parviflora</b>	Ericaceae
Erect shrub with small white to pink flowers in autumn and winter.	1m
<b>Erica patersonia</b>	Ericaceae
Mealie heath, Mielieheide	
Erect shrub, closely packed spikes of tubular yellow flowers resembling 'corn-on-the-cob', from autumn to late winter, sow in autumn, easily cultivated attractive garden or pot subject.	1m
<b>Erica perlata</b>	Ericaceae
Erect shrub, numerous pendulous clusters of small cup-shaped, pearly-white flowers, September to	600mm
<b>Erica perspicua</b>	Ericaceae
Prince of Wales heath	
Easy to grow suitable for moist areas pink and white flowers, September to April.	1 m

<b>Erica peziza</b>	Ericaceae
Kapokheide	
Dense, erect, showy small white flowers in winter and spring, easy grower, frost-resistant, full sun to semi-shade.	600 mm
<b>Erica phylicifolia</b>	Ericaceae
Sparsely erect, long purple tubular flowers in spikes towards the end of the spreading branches, flowering from September to June.	900mm
<b>Erica pillansii</b>	Ericaceae
Erect shrub, bright orange-red tubular flowers, in autumn-winter, prefers damp conditions, sow autumn.	1-1.5m
<b>Erica pinea</b>	Ericaceae
Erect to spreading bushy shrub, large white or yellow tubular flowers borne in profusion from mid summer till autumn, sow in autumn.	0.6 - 1m
<b>Erica plukenetii</b>	Ericaceae
Hangertjie	
Sturdy erect shrub; white, pink or deep red tubular flowers in densely packed hanging spikes, almost all year; sow in autumn; good cut flower, all year.	600-900mm
<b>Erica propinqua</b>	Ericaceae
Erect lanky many branched woody shrub, rosy pink urn-shaped flowers, in threes at branch tips, flower heads tend to droop, spring flowering, sow autumn; good garden or pot subject.	700-900mm
<b>Erica quadrangularis</b>	Ericaceae
Baby Heath	
Upright rounded shrub, masses of small cup-shaped white to almost red flowers from mid winter to mid summer, very floriferous, easily cultivated, sow autumn, good cutflower.	450 - 600 mm
<b>Erica recta</b>	Ericaceae
Blush pink urn shaped flowers, April to May, rockeries.	300-500mm

**Erica regia var. variegata**

Tidy compact plants with red-tipped white tubular flowers in spring, very showy, acid soil, pots.

Ericaceae  
500 mm

**Erica retorta**

Small straggling shrub, sticky pink flowers all year, wet acid soil

Ericaceae

**Erica savillea**

A small rounded well branched shrublet with slightly hairy soft leaves. Great profusion of beautiful pink tubular flowers are produced in summer. The flowers are of medium size and inflated at the base. This plant looks good in containers.

Ericaceae

**Erica scabriuscula**

Robust fairly lax shrub; small cup to urn-shaped white flowers in clusters giving a plume effect, autumn to summer, good cut flower; sow autumn; prefers moist site.

Ericaceae  
1.5-2m

**Erica senilis**

Groundcover, small white hidden flowers, January to February.

Ericaceae  
200mm

**Erica sessiliflora**

Green heath, Groenbottelheide.

Shrub, greenish yellow tubular flowers in short spikes at branch ends, autumn to spring, after flowering the sepals and developing ovaries form a swollen reddish 'fruiting head' resembling a fungal growth, sow autumn, moist but well drained soil.

Ericaceae

**Erica sitiens**

Upright or sprawling shrub; Covered with masses of small inflated tubular flowers from early summer to autumn, the flowers pink, red or white, or red with white lobes; sow in autumn; prefers moist but well-drained conditions.

Ericaceae  
600-900mm

**Erica sonora**

Tall and erect shrub, roundish pink flowers, growing in moist conditions, flowers April to May.

Ericaceae  
1m

<b>Erica sparrmannii</b>	Ericaceae
Erect, green tubular flowers. March to November, rockeries.	400-500mm
<b>Erica sparsa</b>	Ericaceae
Ker-ker	
Erect shrub, masses of small pale rosy pink to white cup-shaped flowers from autumn to early summer, very floriferous, sow in autumn.	900mm
<b>Erica speciosa</b>	Ericaceae
Sturdy well branched shrub, flowers long tubular crimson to pinkish towards the base with green to white or yellow tips, or all pale pink, mid winter to autumn, sow autumn, showy, good cut flower.	0.6 -1.3m
<b>Erica spectabilis</b>	Ericaceae
Sturdy shrub, white, roundish flowers, slightly sticky, mid-winter to spring, grows in coastal and drier inland conditions. Sow autumn.	600 - 700 mm
<b>Erica sphaerocephala</b>	Ericaceae
Urn shaped pink flowers, September to January, rockeries.	300 mm
<b>Erica sphaeroidea</b>	Ericaceae
Robust strong erect shrub, large round slightly sticky pink flowers in umbels, during winter, sow in autumn, decorative shrub.	0.5 - 1.8m
<b>Erica subdivaricata</b>	Ericaceae
Shrub, campanulate white flowers, mid-summer to mid-winter, sow autumn.	1 m
<b>Erica taxifolia</b>	Ericaceae
Upright shrub, clusters of rose pink round to urn-shaped flowers at the tips of the branches, from mid summer to autumn, sow in autumn.	600mm
<b>Erica tenuis</b>	Ericaceae
Honey heath, Heuningheide.	
A dense round shrub, small white strongly fragrant	1 m

flowers in spring, the foliage turns an attractive rusty orange in the late summer.	
<b>Erica thimifolia</b>	Ericaceae
Low scrambling shrublet, tubular-conical, rose-pink flowers.	
<b>Erica thomae</b>	Ericaceae
Robust shrub; long-tubed, sticky white flowers in summer; sow in autumn; strong grower.	
	0.6 - 1m
<b>Erica triflora</b>	Ericaceae
White flowers, spring, good for bouquets.	
	2 m
<b>Erica tristis</b>	Ericaceae
Small tree, small dull cream flowers, November to May, rocky coastal areas.	
	4-5m
<b>Erica tumida</b>	Ericaceae
Shrub, showy scarlet tubular-inflated flowers, summer, sow autumn.	
	1.2m
<b>Erica turgida</b>	Ericaceae
Bushy shrublet, flowers small and cup shaped, pink, summer, sandy conditions, extinct in nature.	
	350mm
<b>Erica urna-viridis</b>	Ericaceae
Sticky heath, Groentaaiheide	
Cape Peninsula endemic. Willowy shrub, sticky green ovoid flowers borne in groups from mid summer to spring, sow in autumn.	
	1m
<b>Erica uysii</b>	Ericaceae
Very rare, for limestone, coastal conditions, bushy shrub, pink flowers in spring.	
	2 m
<b>Erica ventricosa</b>	Ericaceae
Wax heath, Franschoekheide	
Shrub, profusion of dry wax-like shiny but not sticky tubular pink flowers with star-like mouth, borne spring to late summer, sow in autumn, very beautiful plant, good pot subject, sow autumn.	
	1m

### ***Erica verecunda***

Sturdy erect shrub, pink flowers in winter, pendulous, sandy soil, dry conditions.

Ericaceae

1m

### ***Erica versicolor***

Robust shrub, sticky tubular flowers, red base and greenish-white tip, autumn to mid summer, sow autumn, good cutflower, strong grower, suitable for difficult gardens.

Ericaceae

1-3m

### ***Erica verticillata***

Extinct in the wild, was endemic to the Cape Peninsula. Tall upright robust shrub, masses of mauve-pink tubular flowers in clusters at the tips of branches, from mid summer to autumn, sow in autumn, decorative, good garden or pot subject.

Ericaceae

1 - 1.5m

### ***Erica viridescens* var. *viridescens***

Erect well branched shrub; clusters of sticky yellow-green tubular flowers, from mid winter to early summer; sow in autumn.

Ericaceae

0.9 - 1.2 m

### ***Erica viridiflora***

Erect much-branched shrub, sticky vivid emerald green flowers in clusters of three from late winter to autumn, sow autumn, well-drained but moist conditions, semi-shade to full sun, good pot plant.

Ericaceae

0.5 - 1m

### ***Simoechilus multiflorus***

Masses of small pink flowers, winter and spring.

Ericaceae

500mm

### ***Sympieza labialis***

Bushy, small pink, summer, rockeries.

Ericaceae

300-500mm







## GROWING FERNS

The indigenous ferns of South Africa occupy a wide range of habitats varying from semi-arid Namaqualand to the constantly wet forests of the Knysna region. The dry country species are particularly difficult to cultivate, but many of the forest species are suitable for cultivation as pot plants in a greenhouse or in shady sheltered areas outdoors.

The terrestrial species are best grown in a compost made up of equal parts of sand, peat or fern-fibre or palm-peat or well-composted milled bark, and loam. The best results are obtained by growing the plants in clay pots with free drainage. Re-potting is best done in the spring or autumn. During the growing season the plants may be fed with a fish-emulsion (e.g. Seagro).

Forest species do best in a glasshouse, a lathe- or shade- house or in a damp shady area of the garden, depending on the region where they are grown (the area should have a moist buoyant atmosphere without draughts). Ferns with hanging fronds (e.g. *Davallia* and *Adiantum incisum*) are best cultivated in moss lined wire baskets.

The large tree fern, *Cyathea dregei* is sometimes planted as a specimen plant or focal point along streams or on the

perimeter of ornamental pools. They can be reasonably easily transplanted, provided a large root-ball is preserved intact during the process. The more slender-trunked *Cyathea capensis* requires more continuously humid conditions.

If ferns are to be grown for exhibition, it must be borne in mind that the fronds should be evenly displayed all around the plant; consequently such plants should not be left in one position facing the light for any length of time or else all the fronds will be developed on that side.

Scale and mealy bug sometimes infest fern fronds and such affected fronds should be removed, as most commonly used insecticides are very deleterious to fern fronds, especially those of the maidenhairs.

All dead or yellowed fronds should be removed from the plant before placing it on the exhibition table.

Epiphytic ferns may be grown on slabs of cork bark with their roots covered by a mat of moss, or else in small moss-lined wire baskets containing a peat or bark compost.

Ferns are best propagated by division in the early spring or they can be raised from spores which are produced on the under surface of the fronds.

## PROPAGATION

By understanding the life cycle of a fern, successful propagation from spores is greatly enhanced. Seed from a flowering plant is already fertilized and, on germination, produces true leaves. A fern spore, on germination, produces a small comflake-shaped disc, the prothallus, the sole purpose of which is to produce male and female sexual organs. In the

presence of a film of moisture, fertilization takes place and the fertile embryo can now grow and produce true leaves.

## Collecting spores

By careful observation of the sori (the tiny clusters of spore cases situated underneath a fertile leaf, in which the fern's spores are produced and stored) the various stages from: developing, to ripening, to opening can be recognized. Developing sori are pale green and waxy looking. A ripe sorus is plump and will have darkened to a glossy brown or black. Sporangia (spore cases) that have already shed their spores collectively have the appearance of tufts of suede and are fully opened. A 10x magnification hand-lens, will clarify observations.

Select a frond, or piece of frond, with ripe sporangia and lay it sori side down on a clean sheet of paper. Place it in a dry warm place free of any air movement. The spores will be shed within 2 to 3 days. Gently tap the paper to separate the spores from the sporangial debris. The spores look like extremely fine dust. Store in a suitable container, e.g. a pill phial or seamless envelope.

## Preparation for sowing

Select a suitable growing area. This should be under cover, warm and protected from cold draughts and should receive good light but not direct sun.

Flat seedling trays 150 x 200 x 40 mm are ideal containers. Thoroughly clean and sterilize the containers - Jeyes Fluid or sodium hypochloride (Jik) diluted 1:10 is a suitable sterilizing agent.

## Growing medium

A variety of growing media can be used on which to germinate spores: fern fibre, decomposed bark, sphagnum moss, peat or 1 part peat to 2 parts coarse sand. All these have certain properties and acid levels. The main function of the medium is to be a substrate that is able to hold moisture without getting water-logged and that provides a surface on which the developing prothallus can anchor itself. A nutrient-rich medium will promote algal and fungal growth.

Fill the container with the medium to 200 - 300 mm from the top. Thoroughly drench the filled containers with boiling water, cover and allow to cool. This treatment is to control algae and fungi spores.

## Sowing the spores

Working in an environment free of any air movement, gently scatter the spores evenly over the damp medium. The spores can also be scattered onto a piece of clean paper with a slightly rough surface. Cover an area of the paper approximately the same shape as the container and carefully lay face down over the damp medium. Tap the paper and wait a while for the spores to settle and then carefully remove the paper. Either cover the container with clear plastic wrap or place each container inside a clear plastic bag and seal. The sealed container retains enough moisture until germination has occurred and the first true fronds appear. At this stage, remove the plastic and harden off the plants. Water with a fine mist or stand container in a tray of water to one third of its depth. Allow the developing sporelings to reach 150 - 200 mm in height and

then patch off. This is the process whereby a clump of sporelings approximately 10 mm x 10 mm are lifted and transplanted. Use a sterilized medium and apply a well balanced liquid fertilizer at half strength, weekly. Mist the transplanted sporelings regularly and ensure that the medium remains damp. After sufficient development the individual plants can be separated and potted on.

## Spore raising problems

Disappointment is often experienced by both amateur and professional growers. The major pointers are:

- Old or infertile spore. The fresher the spore the higher the germination percentage. Some fern species have spores with a very short viability (termed 'green spores'), as do *Osmunda regalis* and *Todea barbara* have which are viable for an extremely short time.
- Incomplete sterilization can lead to algae, fungi and moss proliferation or the sown spore may carry a contaminant.
- Spores sown too thickly can lead to overcrowding and fertilization is impeded. Immerse or flood the container with lukewarm water.
- Temperature and light. Conditions that are too dark and cold lead to slow sporadic development. Too much light causes yellowing.
- Pathogens such as grey mould may develop despite precautions. Remove infected areas.
- Developing prothalli will be adversely affected by any fungicide or bactericide used.

# Ferns

## **Adiantum aethiopicum**

Pteridaceae

Maidenhair fern, Vrouehaar varieg

Short creeping rhizome, fronds crowded, light green, wedge-shaped pinnate segments borne on wiry black rachis, full shade, well-drained, moist conditions.

500 mm

## **Adiantum capillus-veneris**

Pteridaceae

Maidenhair fern, Vrouehaar varieg

Creeping rhizome, fronds crowded, soft, cascading foliage, a hardy attractive plant which can be used as a potplant or in a shady, well-watered spot outside.

## **Adiantum hispidulum**

Pteridaceae

Rhizome short, wiry stipe 200 mm long, bearing palmate fronds, forms dense clumps, well-drained soil, protect from wind, semi- to full shade.

600 mm

## **Adiantum incisum**

Pteridaceae

Erect short rhizome, fronds arching, linear and simple pinnate, new plantlets are formed at the end of the fronds touching the ground, shade, well-drained, moist conditions.

## **Asplenium boltonii**

Aspleniaceae

Erect, sword-shaped fronds.

300 mm

## **Asplenium gemmiferum**

Aspleniaceae

Long fronds, broad leaflets, shade, moisture-loving.

1 m

## **Asplenium inaequilaterale**

Aspleniaceae

Attractive divided foliage, creeping rhizome forming new plantlets, pot culture, shade.

150 mm

## **Asplenium lobatum**

Aspleniaceae

Shade loving fern with carrot-like foliage. Good container or garden subject.

## **Asplenium monanthus**

Aspleniaceae

Attractive small potplant, occurs in shade areas along streams.

400 mm

**Asplenium sandersonii**

Tufted fronds approximately 100 mm long, arching from upright rhizome, proliferous, producing new plantlets at leaf apex, well-drained humus-rich soil in shade.

Aspleniaceae

**Asplenium splendens**

Attractive carrot-like foliage, pot culture, shade.

Aspleniaceae

200 mm

**Asplenium x flexuosum**

A natural hybrid, glabrous, lanceolate fronds with jagged margin, upright rhizome, well-drained, humus-rich soil, full shade.

Aspleniaceae

650 mm

**Blechnum australe**

Upright growth, producing sword-shaped fronds up to 300 mm long, new growth pink tinged, dimorphic (fertile leaves differ from sterile leaves), well-drained, humus-rich soil in shade or partial sun.

Blechnaceae

300 mm

**Blechnum punctulatum 'Bosvaring'**

A lovely fern with glossy, long sword shaped leaves which are tinged with pink when young, dimorphic (fertile leaves differ from sterile leaves). Likes damp shady positions.

Blechnaceae

**Blechnum tabulare**

A very decorative small tree fern with an attractive rosette of fronds, dimorphic (fertile leaves differ from sterile leaves). Shade.

Blechnaceae

1 m

**Cheilanthes bergiana**

Much-divided pinnae, hairy rachis, moist shady condition.

Pteridaceae

150 mm

**Cheilanthes eckloniana**

Xerophytic fern, summer rainfall areas, grey-green foliage rolls up in adverse conditions, well-drained, humus-rich soil, high light intensity shade, container plant in winter rainfall areas.

Pteridaceae

250 mm

**Cheilanthes viridis var. viridis**

Black wiry stipe, frond broadly triangular, few pinnae triangular, full sun or half shade, well-drained soil, fronds may die back in dry season.

Pteridaceae  
300 - 700 mm

**Cyathea dregei**

Tree fern, Boomvaring

Unbranched stem, fronds few and spreading, grows in full sun in humid areas or in light shade, prefers moist conditions, sensitive to frost, humus-rich soils.

Cyatheaceae  
3 m

**Cyrtomium caryotideum var. micropterum**

Holly fern

Rhizome erect with tufted fronds, large smooth, dark green leaflets, suitable for indoor containers and shaded rock gardens, moist conditions.

Aspidoaceae  
300 - 500 mm

**Dryopteris inaequalis**

Long fronds, finely divided foliage, shade, moist conditions.

Dryopteridaceae  
300 mm

**Elaphoglossum macropodium**

Thin creeping rhizome, simple fronds, sori cover entire under surface of the fertile frond, can be grown attached to bark or in a very well-drained humus-rich soil, naturally found in humid wet forest.

Lomariopsidaceae  
200 mm

**Hypolepis sparsisora**

Rhizome widely creeping, fronds erect, bright green, large and finely divided, semi- or full shade, moist conditions.

Dennstaedtiaceae  
2 m

**Macrothelypteris torresiana**

Large arching fronds, 700 mm wide, damp well-drained humus-rich medium in full shade.

Thelypteridaceae  
1 m

**Megalstrum lanuginosum**

Handsome fern, tufted fronds, soft and slightly hairy, needs deep shade and moist conditions.

Dryopteridaceae  
700 mm

**Microsorium pappei**

Simple glabrous fronds grow from creeping rhizome, grows as an epiphyte in humid subtropical forests.

Polypodiaceae  
600 mm

**Microsorium punctatum**

Short creeping rhizome, rigid, simple fronds, may be treated as an epiphyte in humid conditions or grown in a bark-based medium, high moisture requirements.

Polypodiaceae  
1 m

**Microsorium scolopendrium**

Widely creeping rhizome, large leathery lobed fronds up to 800 mm, can also be epiphytic, creeping up tree stems, humus-rich, well-drained soil, protect from wind, grow in shade or semi-shade.

Polypodiaceae  
800 mm

**Nephrolepis biserrata**

Pot or garden plant, long sword-like fronds, semi-hardy, 3 m moderate shade.

Nephrolepidaceae

**Pityrogramma calomelanos var. aureoflava**

Very decorative fern, stiff tufted dark-green fronds, covered with yellow powder, suitable for containers on patios or amongst rocks in a well-watered garden, full sun or light shade.

Pteridaceae  
500 mm

**Polystichum pungens**

Hard leathery fronds, arching out from branched decumbent rhizome, will grow in semi-shade or full sun.

Dryopteridaceae  
600 mm

**Polystichum sp.**

Shade-loving fern, prefers moist conditions, bipinnate fronds.

Dryopteridaceae  
900 mm

**Polystichum wilsonii**

Shade-loving fern, prefers moist conditions, bipinnate fronds.

Dryopteridaceae  
900 mm

**Pteris buchananii**

Tall fern with creeping rhizome, large triangular-shaped fronds, well-drained humus-rich soil in full shade.

Pteridaceae  
1 m

**Pteris catoptera**

Tall fern, palmate-shaped frond, 600 mm wide supported on strong rachis, approximately 600 mm

Pteridaceae  
1.5 m

long, damp, well-drained, humus-rich soil in shade,  
protect from wind.

**Pteris cretica**

Tufted fronds produced at end of green wiry  
rachis, well-drained humus-rich soil in full shade  
protected from wind.

Pteridaceae  
450 mm

**Pteris dentata**

Sword-like fronds borne at intervals on stem, semi-  
shade.

Pteridaceae

**Rumohra adiantiformis**

Leatherback fern, Seweweeksevaring

Creeping, branched rhizome, triangular, bi-to tri-pinnate  
fronds, 400 mm broad, moist conditions, shade.

Dryopteridaceae

1.3 m

**Selaginella kraussiana**

Clubmoss

Procumbent stems with feathery foliage spreading  
vegetatively to cover the ground, damp, well-drained  
humus-rich soil in shade protected from drying  
winds.

Sellaginellaceae

**Stenochlaena tenuifolia**

Large glossy fronds, creeping rhizome, will climb up  
tree trunks or support, full shade.

Blechnaceae

**Tectaria gemmifera**

Erect rhizome, fronds triangular up to 900 mm long  
and 500 mm wide, buds are borne along central  
rachis of frond, full shade, well-drained moist  
conditions, protect from wind.

Dryopteridaceae

**Thelypteris dentata**

Rhizome short creeping, closely spaced, sword-like  
fronds, attractive, half-shade, moist conditions.

Thelypteridaceae  
300 mm

**Thelypteris madagascariensis**

Crenate, sword-shaped fronds, arching from upright  
rhizome, damp, well-drained, humus-rich soil, heavy  
shade.

Thelypteridaceae  
0.8 - 1 m

## **Thelypteris spp.**

Fern for semi-shade to deep shade and moist conditions, long erect, sword-like fronds.

Thelypteridaceae

400 - 900 mm

## **Todea barbara**

A small tree fern with a short, erect rhizome, and a whorl of bipinnate fronds, wet conditions, sun or light shade.

Osmundaceae

1.5 m



Jeanette Loedliff



Jer. Manring



## GROWING HERBACEOUS PERENNIALS

Herbaceous perennials are vigorous soft stemmed plants noted for their quick growth and seasonal colour. They come in different forms and can fill many different positions in the garden from full sun to shade. They serve to round off the garden by quickly filling in relatively large areas with attractive colourful plants that can easily be replaced.

### Uses for herbaceous plants

Herbaceous plants come in different forms such as groundcovers, low spreading bushes and tall erect plants. This allows the gardener to experiment by mixing plant sizes and forms.

Most herbaceous plants should be used in mass plantings or small groups to provide a spectacular display of colour. Herbaceous plants are also used in specific colour theme gardens such as 'white or red gardens'. The use of colour extends beyond flowers to incorporate leaf colour as well. Leaves are also used for their interesting textural effect.

Herbaceous borders are a very popular way of using mixed plantings of a variety of plant forms and colour combinations. They require a good deal

of planning and preparation, but the rewards are great.

Herbaceous plants make good fillers and edging plants, but they also serve the useful function of softening the planting in the garden. These are the perfect plants to quickly fill pots and hanging baskets with riots of colour that extend over a long period.

### **Soil preparation**

Herbaceous plants require thorough soil preparation to ensure optimum growth and development. They are either used as bedding plants or cut back severely in winter and must therefore develop fully and produce flowers in a season. There are no short cuts to success. It is essential to add as much well rotted organic material to the soil as possible. The organic material will help to enrich the soil and improve moisture retention while at the same time ensuring good drainage and aeration. The addition of organic material encourages the development of beneficial soil micro-organisms and earthworms, which help to improve the texture of the soil and nutrient availability.

Dig the plant bed over to loosen and aerate the soil and then add compost and fertiliser. Liberally sprinkle superphosphate and slow release 3:1:5 fertiliser onto the plant-bed at the rate of 1kg of each for 10 square meters. Dig the bed over to work in the compost and fertiliser and water well after planting. An additional layer of compost or mulch on the surface of the soil helps to retain soil moisture.

Keep the plants well watered especially in hot dry weather. Water deeply at least three times a week in

summer to encourage the roots to penetrate the soil and become well established. Shallow watering will result in shallow root development and render the plants more susceptible to dry periods. It is nevertheless important to monitor the condition of the soil as over watering is also detrimental to plant growth.

Herbaceous plants are greedy feeders and should be fed regularly throughout the growing season. Apply slow release fertiliser 3:2:1 every two months to encourage foliage growth and 3:1:5 for flower development.

Plants originating from the winter rainfall region must be watered throughout the winter if planted in the summer rainfall area and vice versa.

Perennial herbaceous plants can be maintained in good condition for a number of years by pruning from mid to late winter. The more vigorous groundcovers are heavily pruned in early spring. Apply a thick layer of compost as mulch around the plants and add slow release fertiliser.

Herbaceous plants are quick growing and flower freely making them an essential component in gardens. Testimony to this is the impressive range of South African herbaceous plants gracing the gardens and window boxes of Europe.

## Herbaceous

### **Aeollanthus buchnerianus**

Perennial succulent aromatic groundcover, pink flowers in autumn, sow spring.

Lamiaceae

### **Aeollanthus parvifolius**

Attractive perennial succulent, aromatic groundcover, pink flowers in autumn, full sun. Drought hardy.

Lamiaceae

300 mm

### **Aerva leucura**

Aambeibossie

Erect, shrubby perennial, flowers in white woolly spikes.

Amaranthaceae

750 mm

### **Alchemilla capensis**

A groundcover with attractive rounded foliage for semi-shaded and damp areas.

Rosaceae

### **Anchusa capensis**

Cape forget-me-not, Vergeetmynietjie

A rounded herb with bright blue flowers in spring - summer. Sow late summer for a spring display, or spring for a summer display. Requires a sunny, well-composted bed. Cut back after flowering.

Boraginaceae

300-600mm

### **Arctotis acaulis**

Marigold, Botterblom

A compact, rounded herb with silvery foliage and large pink, red or yellow flowers with dark centres, in spring to summer. Perennial, but can be treated as annual, grown from cuttings or seed. Sow in autumn. Sunny position, long flowering.

Asteraceae

500mm

### **Arctotis aenea**

Groundcover, grey foliage, orange or yellow flowers in spring, full sun, well-drained conditions.

Asteraceae

200 mm

### **Arctotis arctotoides**

Spreading groundcover, attractive yellow flowers August to April, suitable for embankments and coastal areas, full sun.

Asteraceae

200mm

<b>Arctotis aspera</b>	Asteraceae
Vigorous, rough leaves, flowers yellow, good groundcover. 1m	
<b>Arctotis auriculata</b>	Asteraceae
Drought-resistant ground cover, leaves silvery, flowers yellow or pink, winter rainfall area, sow autumn. 500 mm	
<b>Arctotis hybrid</b>	Asteraceae
A hardy, quick growing ground cover with large attractive daisy flowers.	
<b>Arctotis laevis</b>	Asteraceae
Yellow or white flowerheads, August to October. 200 - 900 mm	
<b>Arctotis sp. nova 'Silver lining'</b>	Asteraceae
Groundcover, yellow flowers in summer, small green leaves with a silver lining, full sun. 200mm	
<b>Arctotis stoechadifolia</b>	Asteraceae
Spreading groundcover, grey-green leaves, flowers mixed colours. 300 mm	
<b>Arctotis stoechadifolia x aspera</b>	Asteraceae
Grey-leaved groundcover, strong grower, ideal for dry sunny banks. 300mm	
<b>Artemisia afra</b>	Asteraceae
Wormwood, Wildeals 1.5 m	
Evergreen, rounded plant with upright canes, silver-grey carrot-like aromatic foliage, yellow flowers, summer, full sun.	
<b>Asparagus declinatus</b>	Asparagaceae
Spreading shrub with annual branches with a tendency to scramble, flowers July to October, suitable for Cape gardens, sow autumn. 1 m	
<b>Asparagus densiflorus</b>	Asparagaceae
Compact feathery foliage borne on decumbent arching stems, small white flowers, red berries, groundcover, container plant in full to half shade, spread 700mm. 300 - 600 mm	

<b>Asparagus densiflorus ‘Cwebe’</b>	Asparagaceae
Emerald fern asparagus	
Attractive, evergreen groundcover with gracefully arching stems and fine, cascading foliage. Tiny sweet-scented white flowers in autumn and shiny red berries in winter. Adaptable, shade-loving; mass plant, feature plant or pot plant in shade.	300 mm
<b>Asparagus densiflorus ‘Flagstaff’</b>	Asparagaceae
Scrambling, low, evergreen groundcover, sun or semi-shade.	400 mm
<b>Asparagus densiflorus ‘Mazeppa’</b>	Asparagaceae
Evergreen groundcover for sun or semi-shade, suited to pots and hanging baskets.	300 mm
<b>Asparagus densiflorus ‘Meyersii’</b>	Asparagaceae
Foxtail fern, Cats tail asparagus	
A very ornamental foliage plant with long soft foliage branches arising from a central point, akin to a cats tail in shape. Shade or semi-shade.	300 - 600 mm
<b>Asparagus densiflorus ‘Sprengeri’</b>	Asparagaceae
Groundcover for shade, pots and hanging baskets.	300 - 600 mm
<b>Asparagus falcatus</b>	Asparagaceae
Tall climber with glossy dark green leaves and large spikes, small white very sweet-smelling flowers, red berries, winter, sun to light shade.	
<b>Asparagus laricinus</b>	Asparagaceae
Compact, thorny shrub, fine leaves, red berries, scented white flowers, hardy.	1 m
<b>Asparagus oxyacanthus</b>	Asparagaceae
Flowers yellow and white, November to January, xerophytic, rocky areas.	
<b>Asparagus ramosissimus ‘Cascade’</b>	Asparagaceae
A soft textured mounding or cascading groundcover with fine, feathery, light green foliage. Small white flowers in late summer, followed by orange-red berries. A desirable subject for shady gardens and patios, partial to full shade.	

<b>Asparagus recurvispinus</b>	Asparagaceae
Densely branched, very spiny shrub, foliage greyish-green, small white sweet-smelling flowers in November, full sun, sandy soil.	0.5-1m
<b>Asparagus retrofractus</b>	Asparagaceae
Katdoring	
A scrambler with attractive architectural stems and fine foliage. White flowers in autumn are followed by attractive berries. Good for rockeries or in a container for a hot position.	
<b>Asparagus scandens</b>	Asparagaceae
A scrambling climber with stems up to 2m and fine featherlike foliage. White flowers are borne in summer followed by attractive red fruits, damp shady position.	2m
<b>Asparagus virgatus</b>	Asparagaceae
Katbosdoring	
Fine soft leaves, orange-red berries, shade-loving, good florist material.	1 m
<b>Asystasia gangetica</b>	Acanthaceae
Compact spreading evergreen ground cover, flowers white with blue markings on lip, March to October. Sunny position in rich soil.	500 mm
<b>Atriplex cinerea</b>	Chenopodiaceae
Grey-leaved groundcover, ideal for dry summer conditions.	200mm
<b>Ballota africana</b>	Lamiaceae
Aromatic herb, square stems, purplish flowers, fast growing, sow in spring.	700mm
<b>Barleria 'Purple Prince'</b>	Acanthaceae
A spreading groundcover or trailing shrublet with dark glossy green leaves and deep purple flowers produced regularly throughout the year. Full sun to light shade.	

<b>Barleria elegans</b>	Acanthaceae 400mm
Very decorative herbaceous shrub, white flowers in autumn, prickly seed pods, sow spring, prune back after flowering.	
<b>Barleria gueinzii</b>	Acanthaceae 0.5 - 1 m
Blue flowered rambling perennial from the summer rainfall area. Plant in full sun or semi-shade.	
<b>Barleria monticola</b>	Acanthaceae 600mm
A winter dormant plant, with soft hairy leaves and attractive flowers in the autumn, requires a warm well drained position and summer water.	
<b>Barleria obtusa</b>	Acanthaceae 800mm
Hardy rambling herbaceous shrublet for sunny positions. Produces blue or pink flowers in autumn (Apr. - May). Well suited to banks, mixed borders and dry areas.	
<b>Barleria repens</b>	Acanthaceae
Excellent ground cover for full sun or semi-shade, medium grower, glossy green leaves with purple flowers.	
<b>Begonia sonderiana</b>	Begoniaceae 300mm
Similar to Begonia dregei but smaller, dentate leaves, flowers white to pale pink, floriferous during summer months, swollen base to stem. Suitable for containers or a well-drained shady position, cold sensitive.	
<b>Berula erecta</b>	Apiaceae
A vigorous ground cover, with fernlike foliage for in or near water, this plant has been used in water filtration and purification. Very fast growing.	
<b>Cenia turbinata (Cotula turbinata)</b>	Asteraceae
A hardy groundcover with attractive fine silvery foliage and button-like, yellow flowers. Ideal for soil stabilisation as the plant roots down as it grows.	

<b>Chaetacanthus setiger</b>	Acanthaceae
A groundcover for coastal and warm gardens.	100 mm
<b>Chironia baccifera</b>	Gentianaceae
Christmas-berry, Bitterbessie	
Compact rounded fast-growing shrubby perennial, shiny pink star-like flowers, red berries, suitable for sandy coastal gardens, sow autumn or spring.	500 mm
<b>Chironia laxa</b>	Gentianaceae
Shiny pink star-like flowers, sow spring.	500 mm
<b>Chrysocoma coma-aurea</b>	Asteraceae
Bushy, covered in yellow globular heads, September to November.	500 mm
<b>Cineraria saxifraga</b>	Asteraceae
A lovely rounded shrublet with finely divided foliage and a profusion of small yellow daisy flowers from spring to autumn. This plant will grow in half -shade and full sun.	500mm
<b>Clematopsis scabiosifolia</b>	Ranunculaceae
Pluimbossie	
Shrublet with annual shoots from a woody rootstock, covered with silvery hairs, drooping pink flowers reminiscent of Hellebore, decorative upright feathery fruiting heads, sow spring.	1m
<b>Cliffortia ferruginea</b>	Rosaceae
Glastee, Pypsteelbos, Teringtee	
A hardy evergreen flat groundcover with attractive small glossy green foliage for sunny to half-day sun positions. Very good in coastal gardens.	300mm
<b>Cotula lineariloba</b>	Asteraceae
Attractive groundcover, grey-green leaves with masses of yellow flowers in spring and summer, full sun.	
<b>Cyperus albo-straitus</b>	Cyperaceae
A distinctive plant with stems crowned with an ornamental umbrella of foliage. This plant is very	300 mm

'Japanese' in its growth style, suitable for waterside planting.

**Cyperus prolifer**

Water-loving plant with finely textured foliage.

Cyperaceae  
400 mm

**Cyperus sp.**

An upright grass-like plant with attractive brown flower heads for shady areas, occurring naturally in the Peninsula forests.

Cyperaceae  
300 mm

**Cyperus textilis**

Matjiesgoed

Clumps of slender green culms with umbrella of narrow leaves at the tips, waterside or damp position, used for basketry.

Cyperaceae  
1m

**Dianthus basuticus subsp. basuticus**

Lesotho pink, Lesothose wilde-angelier

Densely tufted herb with woody rootstock. Flowers 200 mm with pinkish petals.

Caryophyllaceae

**Dianthus caespitosus**

Loosely tufted spreading perennial, pink or purple flowers, summer, sow autumn.

Caryophyllaceae  
100-300mm

**Dianthus sp.**

Wild pinks

Tufted perennial with grey-green leaves and many star-shaped carnation-like pink or white flowers. Prefers a hot dry position and does well on banks or in coastal gardens.

Caryophyllaceae

**Dianthus zeyheri**

Tufted perennial with rose or white flowers, full sun, well drained soil, keep moist in summer.

Caryophyllaceae

**Diascia 'Ruby Fields'**

A delightful low growing diascia with bright ruby pink flowers in profusion all year.

Scrophulariaceae

**Diascia 'Salmon Supreme'**

A vigorous, prostrate hybrid, very floriferous bearing hundreds of cheerful peach coloured flowers.

Scrophulariaceae

<b><i>Diascia barberae</i></b>	Scrophulariaceae
Small erect perennial tipped with spikes of deep pink flowers which bloom all summer - excellent for mass planting.	
<b><i>Diascia fetcaniensis</i></b>	Scrophulariaceae
Pink flowered perennial, suitable for groundcover or container planting.	150mm
<b><i>Diascia integerrima</i></b>	Scrophulariaceae
Herbaceous perennial, pink or occasionally white flowers in summer, sunny damp conditions.	150 mm
<b><i>Diascia mollis</i></b>	Scrophulariaceae
A spreading soft groundcover with rounded leaves and numerous pink flowers. Suitable for shady and semi-shade areas, easy to grow, attractive,	150mm
<b><i>Diascia rigescens</i></b>	Scrophulariaceae
Strong, upright, vigorous growing diascia with showy, light pink blooms all year.	500 mm
<b><i>Diascia vigilis</i></b>	Scrophulariaceae
Twinspur	
A fast-growing, drought resistant groundcover. Masses of pale pink flowers in summer and autumn. Plant in full sun and water regularly.	
<b><i>Dicoma zeyheri</i></b>	Asteraceae
Dolls protea	
Silver-green foliage, flowers trist e-like pale green to pale mauve to white, unusual.	150 - 400 mm
<b><i>Dimorphotheca cuneata</i></b>	Asteraceae
Brides bouquet, Mak-bietou	
Fast-growing, showy perennial. Bears masses of white, yellow or orange daisy flowers in spring. Frost and drought hardy. Plant in full sun. Prune back after flowering. Requires to be well watered in winter.	500 mm
<b><i>Dissotis canescens</i></b>	Melastomataceae
Ordeal bean, Kalwerbossie	

Small erect shrubby perennial, occurs in damp places,  
flowers deep pink to mauve, summer, attractive.

500mm

## **Dissotis princeps**

Soft hairy herbaceous shrub, large mauve or white  
flowers in summer and autumn, moisture-loving, frost  
tender, prune back hard in winter.

Melastomataceae

1.5-2m

## **Drosera capensis      Droseraceae**

Sundew

*Drosera capensis* belongs to the  
fascinating group of carnivorous plants. It  
is fairly common in the south-western  
Cape in marshes and fynbos.

The plants are generally found in  
acidic, poor soils where nutrients such as  
nitrogen are deficient. The leaves capture  
and digest small insects, and utilize them  
as a complementary source of nitrogen.  
The leaves are covered with many  
stalked glands which encourage the prey  
to settle and feed on the sugary, sticky  
fluid secreted from the glands. The  
glistening of these droplets in the sunlight  
suggests the common name sundew.  
After a while the insect becomes mired  
down and as it struggles it comes into  
contact with more and more glands until  
it is exhausted and drowns in the sticky  
secretions. The movement of the prey  
induces digestive enzymes to be  
secreted from the glands, which break  
down the soft tissue leaving a husk,  
which is often blown away by the wind.  
The leaf actually rolls itself around the  
insect and straightens out again after  
having digested the nutrients. Every leaf  
can go through this action several times,  
after which it dies down.

*Drosera capensis* is a small,  
herbaceous plant, growing to a height of  
about 120 mm and 150 mm in diameter.

The flowers are small, pink or mauve,  
and develop on a long flower stem. The  
plant flowers for a period of several  
weeks, mostly during December and  
January, but indoors, at any time during  
the year. The plants can be grown  
outdoors in a wet water-logged area in  
full sun or light shade, or indoors  
standing in a saucer filled with water in a  
sunny or very light position. The growing  
medium should consist of one part  
washed peat and one-part washed river  
sand.

### **Propagation**

The plants are easily propagated by  
sowing the fresh, very fine seed on a  
layer of washed peat which is placed  
over some coarse river sand. After  
sowing, spray lightly with a fungicide  
such as Kaptan and cover the pot with  
plastic to prevent loss of moisture.

### **Cultivation**

The plants should be repotted whenever  
they appear to be unhealthy or when  
they have been in the same pot for more  
than two years. The old medium must be  
washed from the roots, which should be  
dipped in a suitable fungicide such as  
Kaptan, and then planted in the fresh  
medium. The plants should be watered  
from the bottom to prevent soil from  
being splashed onto the leaves. Placing  
the pot in a deep saucer filled with water

provides all the necessary moisture.  
*Drosera capensis* does not like heavy

feeding but can be fed once every two weeks with a weak solution of Chemicult.

**Dymondia margaretae**

Asteraceae

Flat growing ground cover with attractive silver and dark green leaves, yellow flowers in summer - excellent between paving stones.

**Elephantorrhiza elephantina**

Fabaceae

Elandsboontjie

Shrubby perennial, grows from a large underground rhizome, aerial parts die back each year, leaves acacia-like, flowers cream-yellow, fruit a woody reddish-brown pod, suited to hot dry areas.

0.3 - 1.5 m

**Eumorphia prostrata**

Asteraceae

Spreading habit, silver grey foliage, small white daisy flowers in late summer, good ground cover and cascading plant.

500mm

**Falkia repens**

Convolvulaceae

A beautiful and vigorous ground-cover with rounded leaves and lovely open pale pink flowers. It grows well in a variety of conditions including dry, wet, shade or full sun. It is a useful filler or edging plant.

**Felicia aethiopica**

Asteraceae

Wilde-aster

Spreading, compact shrublet with pale blue daisy flowers all year round. Full sun.

500mm

**Felicia aethiopica subsp. aethiopica**

Asteraceae

Bloublombossie

Neat compact growth habit, covered with blue flowers in spring.

300mm

**Felicia amelloides 'White'**

Asteraceae

Compact, neat bush, covered with white daisy flowers all year.

500 mm

**Felicia bergerana**

Asteraceae

Low growing shrublet covered in masses of bright blue flowers all year.

<b>Felicia echinata</b> Bloublommetjie Small shrubby perennial, large blue, mauve or white daisies, April to October.	Asteraceae 600 mm
<b>Felicia elongata</b> Flowers white with maroon band, spring flowering, sow autumn.	Asteraceae 150 - 300 mm
<b>Felicia erigeroides</b> Attractive summer flowering species of Felicia, good for coastal gardens tolerates wind and sand.	Asteraceae 300 mm
<b>Felicia filifolia</b> Hardy, woody perennial, covered with showy deep purple to white flowers for a long period, recommended. A well drained position in full sun.	Asteraceae 600 mm
<b>Felicia linifolia</b> An easy to grow, compact shrublet covered with masses of cheerful bright blue flowers all year, plant in full sun.	Asteraceae 300mm
<b>Felicia petiolata</b> Wild felicia A sprawling groundcover. Masses of pale lilac daisies are borne in early summer. Plant in full sun to semi-shade. Good for hanging baskets or planters. Frost hardy.	Asteraceae 300 mm
<b>Ficinia truncata</b> A compact ground cover with attractive rosette of dark green and silver striped leaves. Ideal for coastal gardens.	Cyperaceae
<b>Gazania hybrid</b> Groundcover, grey foliage, flowers of various colours, January to December but peaking during the summer months, full sun, any soil, hardy, suitable for coastal areas.	Asteraceae 250mm
<b>Gazania krebsiana</b> Botterblom	Asteraceae

Flowers orange to scarlet, sow in late summer to autumn.	150 mm
<b>Gazania linearis hybrid</b> An attractive fast growing groundcover with showy yellow flowers, does well on sandy soils, requires full sun.	Asteraceae 250mm
<b>Gazania linearis var. linearis</b> Showy perennial plant with yellow flowers.	Asteraceae 200mm
<b>Gazania maritima</b> Groundcover, yellow flowers with dark rings in summer, full sun.	Asteraceae 200mm
<b>Gazania rigens var. rigens</b> A highly desirable groundcover with green foliage and large yellow daisy flowers, well suited to coastal and Cape Flats conditions.	Asteraceae 150 mm
<b>Gazania rigens var. uniflora</b> A highly desirable groundcover with silver foliage and large yellow daisy flowers, well suited to coastal and Cape Flats conditions.	Asteraceae 200 mm
<b>Geranium incanum</b> Carpet geranium Evergreen, spreading groundcover, attractive lacy foliage, showy mauve flowers all year, sun or semi-shade, sow autumn or spring.	Geraniaceae 300 mm
<b>Geranium wakkerstroomianum</b> Vigorous attractive groundcover with masses of white flowers in summer. Enjoys moist-wet places. Plant in full sun position.	Geraniaceae
<b>Gerbera cordata</b> Herbaceous tufted perennial, white flowers throughout the year, semi-shade, best cultivated in coastal gardens, sow spring or summer.	Asteraceae 300 mm
<b>Gerbera jamesonii</b> Barberton daisy Perennial with basal rosette of leaves, orange to red daisy flowers on long stalks, sow spring.	Asteraceae 400mm

<b>Gerbera viridifolia</b>	Asteraceae
Purple Barberton daisy	
A stunning purple flowered Barberton daisy that does well in a rich soil, requires water in summer.	350mm
<b>Haplocarpha scaposa</b>	Asteraceae
Tonteldoosbossie	
Stemless perennial herb, leaves in a basal rosette, often rough to the touch, lower surface white felted, yellow daisy flowers on solitary leafless stalks, 300-450 mm. tall in summer.	
<b>Hebenstretia dura</b>	Selaginaceae
A perennial with narrow leaves and terminal spikes of orange throated white flowers in early summer	150-400mm
<b>Helichrysum 'Silver Lace'</b>	Asteraceae
A lovely compact herbaceous plant with soft grey foliage. It thrives in well drained soils in full sun or light shade. Most suitable as a filler plant along a border or in mixed containers.	
<b>Helichrysum argyrophyllum</b>	Asteraceae
Golden guinea everlasting, Vaalsewejaartjie	
Grey-leaved mat-forming groundcover, many small golden yellow everlasting daisy flowers during summer, good for rockery or terraced walls, full sun, sow autumn or spring.	100 mm
<b>Helichrysum chionosphaerum</b>	Asteraceae
Compact low growing perennial, use in rockeries and dry stone walls, frost resistant, suitable for cold inland gardens.	100mm
<b>Helichrysum cymosum</b>	Asteraceae
Gold carpet	
A fast growing, hardy, grey leafed groundcover with yellow flowers in summer. Full sun. Sow Autumn or Spring.	100 - 500 mm
<b>Helichrysum dasyanthum</b>	Asteraceae
Evergreen, spreading, silver-grey foliage, small yellow flowers in flat heads in spring and summer, suitable for coastal gardens.	500 mm

<b>Helichrysum petiolare</b>	Asteraceae
Kooigoed	
A vigorous plant with aromatic grey woody foliage, flowers silvery with yellow centre, sun to semi-shade.	1 m
<b>Helichrysum petiolare 'Limelight'</b>	Asteraceae
A spreading groundcover with luminescent yellow-green oval leaves. It provides an interesting textural contrast to the green Plectranthus foliage. It is short lived and will need replacing every two to three years.	1 m
<b>Helichrysum populifolium</b>	Asteraceae
Perennial, large silver-grey poplar-like leaves, cream flowers, prefers light shade.	1m
<b>Helichrysum setosum</b>	Asteraceae
Erect or decumbent, golden yellow flowerheads 20 - 30 mm across, decorative dried.	600 - 800 mm
<b>Helichrysum splendidum</b>	Asteraceae
Yellow everlasting, Geel sewejaartjie	
Attractive fast growing bush with striking silver-grey foliage, yellow flower heads in spring, sow spring or autumn.	600 - 800 mm
<b>Helichrysum sutherlandii</b>	Asteraceae
A cushion shaped plant with silvery-grey leaves and white flowers. Requires a sunny well drained position, prune hard when looking untidy.	300 mm
<b>Helichrysum teretifolium</b>	Asteraceae
A compact neat grower with dark green conifer-like leaves and cream flowers. An excellent coastal ground cover and ideal for banks.	
<b>Helichrysum wilmsii</b>	Asteraceae
A cushion-form shrublet with masses of wine-red flower buds that open to show white faces. Hot sunny position.	
<b>Hemizygia canescens</b>	Lamiaceae
Aromatic groundcover, sun or semi-shade, pink flowers in autumn, sow spring, recommended.	500mm

**Hemizygia obermeyeriae**

A hardy, woody, rounded shrub with oval aromatic leaves. Produces a profusion of pink salvia-like flowers in summer with persistent purple bracts that last to mid-winter. Best planted in long bold sweeps in full sun or areas receiving morning shade.

Lamiaceae

1.5 m

**Hemizygia petiolata**

Attractive rounded bush with spicy aromatic leaves, frost tender.

Lamiaceae

500 mm

**Hemizygia teucrifolia**

Pink flowered showy perennial from the summer rainfall area, worth while.

Lamiaceae

400 mm

**Hemizygia transvaalensis**

Pink salvia

Shrubby perennial, soft foliage, pink salvia-like flowers in terminal spikes in summer, very decorative, mixed borders or massed, sun or semi-shade, prune after flowering, sow spring.

Lamiaceae

1 m

**Hermannia pinnata**

Fast growing groundcover with fine textured foliage. It produces a profusion of honey-scented, orange bell-shaped flowers in early summer. Best in full sun or light shade. Plant in well drained soils in rockeries, herbaceous borders or mixed containers.

Sterculiaceae

**Hermannia saccifera**

Komynbossie

A sprawling groundcover forming a dense mat of foliage and masses of beautiful hanging yellow bell-shaped flowers in spring. Best on slopes. Full sun.

Sterculiaceae

250 mm

**Hermannia stricta**

Striking red flowers. A hot well drained sunny position.

Sterculiaceae

**Hypoestes aristata**

Ribbon bush

Rounded herbaceous shrub, mauve flowers in showy spikes in autumn, semi-shade or sun, very attractive, sow spring.

Acanthaceae

1m

### **Hypoestes aristata 'Purple Haze'**

Acanthaceae

A fast growing, attractive rounded shrub for full sun or light shade. This Kirstenbosch selection is a more compact growth form with dark green leaves and beautiful clusters of dark purple flowers.

### **Hypoestes forskalii**

Acanthaceae

A groundcover with a dense mat of dark green leaves and attractive groups of white flowers in winter. Good edging plant on slopes or flat beds in full sun or light shade.

### **Impatiens flanaganiae**

Balsaminaceae

Attractive plant for semi-shade, pink flowers, summer growing, dormant in winter, sow spring.

1 m

### **Impatiens hochstetteri**

Balsaminaceae

Ideal plant for shade gardens, needs plenty of water and humus rich soil.

600 mm

### **Impatiens sylvicola**

Balsaminaceae

Wild balsam

Soft shade-loving plant, pink flowers, needs plenty of water, suitable for a forest garden.

300 mm

### **Impatiens zombensis**

Balsaminaceae

A delicate herbaceous plant with numerous small dark pink flowers. Shade to semi-shade.

300 mm

### **Knowltonia vesicatoria**

Ranunculaceae

Brandblaar

Attractive foliage, reminiscent of Hellebore, flowers greenish flushed purple during spring, shade-loving, sow autumn.

300 mm

### **Lasiospermum bipinnatum**

Asteraceae

Finely divided fern-like leaves, white daisy flowers, reminiscent of Chamomile, forms dense stands, summer-flowering, sow autumn.

300 - 600 mm

### **Leonotis leonurus**

Lamiaceae

Lions-ear, Wild dagga, Klipdagga

Fast growing herbaceous shrub, velvety bright

2 m

orange or white flowers in distinctive 'pom-poms' along the upright stems during autumn, also good for drying, sow spring or autumn.

### **Leonotis leonurus 'White Lion'**

Lamiaceae

Lions-ear, Klipdagga

Tall herbaceous perennial with long tapering leaves.

2 m

Produces a spectacular show of creamy-white flowers, in whorls arranged at intervals along the upper stems. This hardy, drought resistant plant grows well in most gardens in full sun.

### **Leonotis ocymifolia**

Lamiaceae

Minaret flower, Wild dagga, Duiwelstabak

Herbaceous shrub with orange or white flowers in pom-pom like clusters. Prune hard in the winter.

1 - 2.5 m

### **Leysera gnaphalodes**

Asteraceae

Hongertee, Skilpadteebossie

Small silvery shrublet, yellow daisy flowers in spring-summer, sow autumn. Well suited to hot sandy conditions.

200-500mm

### **Limonium perigrinum**

Plumbaginaceae

Sea lavender

Leathery leaves, pink clusters of papery flowers, this plant requires very well drained, sandy soil and seed is difficult to germinate, sow autumn.

300 mm

### **Linum africanum**

Linaceae

African flax

A shrublet with yellow flowers in summer and attractive grey foliage. Suitable for coastal gardens.

500mm

### **Lobelia aniceps**

Campanulaceae

This attractive lobelia has lush green leaves, bright blue flowers and thrives near water and in wet areas, shade tolerant.

### **Lobelia comosa**

Campanulaceae

Erect, basally branched perennial shrublet, flowers violet blue or bright mauve, in summer, sow autumn.

300 - 500 mm

<b>Lobelia cuneifolia</b>	Campanulaceae
Dark green leaves with pretty blue flowers, good for hanging baskets, shady areas.	
<b>Lobelia pinifolia</b>	Campanulaceae
Wild lobelia	
Perennial, light blue flowers most of the year, sow spring or autumn.	200 - 500 mm
<b>Lobelia valida</b>	Campanulaceae
Galjoenblom	
Perennial, forms clumps, strong fleshy stems and leaves, large head of deep blue flowers with white centre, summer, sow autumn.	600 x 500 mm
<b>Manulea altissima</b>	Scrophulariaceae
Robust annual or perennial with basal rosette of leaves, white flowers in spring, sow in autumn.	200 - 600 mm
<b>Melianthus villosus</b>	Melianthaceae
Bushy, dense shrub, leaves serrated, flowers cream to green in a raceme, December to January.	1 - 1.5 m
<b>Mentha longifolia</b>	Lamiaceae
Wild mint, Kruisement	
Rhizomatous perennial, flowers white to mauve, crowded at nodes in summer, prefers damp habitat, sow autumn or spring.	1-1.5m
<b>Mentha longifolia subsp. capensis</b>	Lamiaceae
Wild peppermint	
Aromatic culinary herb, rhizomatous perennial, mauve flowers crowded at nodes, in summer, prefers damp habitat, sow autumn or spring.	1 m
<b>Mentha longifolia subsp. polyadena</b>	Lamiaceae
Kruisement, Wild mint	
Widespread, prefers moist areas, white to mauve flowers during summer.	1 m
<b>Mentha longifolia subsp. wissii</b>	Lamiaceae
Wild mint, Kruisement	
Rhizomatous perennial, flowers white to mauve,	1m

crowded at nodes in summer, prefers damp habitat, sow autumn or spring.

### **Monopsis lutea**

Yellow lobelia

Sprawling narrow-leaved herb, yellow flowers during summer, good soil-binder rooting down as it grows, suitable for coastal gardens, sow autumn.

Campanulaceae

200 mm

### **Monopsis unidentata**

Fast-growing groundcover with purple flowers, keep watered during summer, sun to semi-shade. Suitable for hanging baskets but requires regular feeding.

Campanulaceae

### **Monsonia speciosa**

Butterfly flower, Slangblom

Large showy pink flowers, suitable for planting in paving, needs dry conditions in summer, winter growing.

Geraniaceae

300 mm

### **Nemesia fruticans 'Blue'**

Bushy compact perennial, covered in myriads of small blue flowers.

Scrophulariaceae

### **Nemesia fruticans 'Pink'**

Bushy compact perennial, covered in myriads of small pink flowers with yellow throats.

Scrophulariaceae

### **Nemesia fruticans 'White'**

Bushy compact perennial, covered in myriads of small white flowers with yellow throats.

Scrophulariaceae

### **Oplismenus hirtellus**

Compact low growing, creeping grass found growing in shady forests, ideal groundcover for shady moist gardens.

Poaceae

### **Orphium frutescens**

Perennial, shiny rose-pink flowers, spring to autumn, suitable for sandy, coastal gardens, sow spring or autumn.

Gentianaceae

500 mm

<b>Orthosiphon amabilis</b>	Lamiaceae
Rounded shrub, pink flowers in summer, full sun.	1 m
<b>Orthosiphon labiatus</b>	Lamiaceae
Pink sage	
Herbaceous shrub with purple flowers in spring to summer, full sun, organic rich soil, good cut flower, aromatic leaves.	1.5 m
<b>Orthosiphon serratus</b>	Lamiaceae
Multi-stemmed shrub from woody root, leaves opposite, oval to elliptical, regularly serrate, simple inflorescence of tubular, pink to mauve flowers.	300 - 900 mm
<b>Osteospermum 'Buttermilk'</b>	Asteraceae
Strong growing, upright bushes, bearing many large, buttermilk-coloured, daisy flowers.	500mm
<b>Osteospermum 'Giles Gilby'</b>	Asteraceae
A bushy perennial that has leaves with a good gold variegation and attractive pink daisy flowers.	
<b>Osteospermum caulescens</b>	Asteraceae
Small shrub with white flowers, suitable for use in a mixed perennial border.	200 mm
<b>Osteospermum ecklonis</b>	Asteraceae
Vanstadens River daisy, Jakkalskos	
Bushy perennial, large white daisies with purple centres, spring and summer, very showy, sow autumn or spring, drought tolerant, sunny position.	750 mm
<b>Osteospermum fruticosum</b>	Asteraceae
Rank magriet	
A quick growing hardy ground cover with masses of purple daisy flowers. Ideal for difficult areas, rockeries, retaining walls and embankments.	
<b>Osteospermum jucundum</b>	Asteraceae
Soft herbaceous ground cover with opposite leaves, flowers during spring, suitable for sunny conditions.	200 mm

**Osteospermum oppositifolium**

Erect shrublet, flowers yellow or orange, July to October, sandy areas or karoo gardens.

Asteraceae

0.5 - 1 m

**Otholobium decumbens**

Agdaegeneesbos

Trailing or spreading shrubby perennial, blue-mauve pea-flowers in spring, sow autumn, good groundcover.

Fabaceae

**Peperomia blanda**

Creeping perennial with glossy succulent leaves, flowers minute in greenish spikes, summer, full shade.

Piperaceae

300mm

**Peperomia retusa**

Small perennial with glossy succulent leaves, flowers minute in summer, full shade.

Piperaceae

100 mm

**Peperomia tetraphylla**

Small perennial with faintly striped leaves, flowers minute, full shade.

Piperaceae

200 mm

**Phygелиus aequalis**

Fast growing perennial, branching from base, drooping tubular yellow flowers on tall spikes during summer, sow spring, sun to semi shade, damp situation or waterside plant. Prune hard post flowering.

Scrophulariaceae

1 - 2 m

**Phygелиus capensis**

Fast growing with dark green leaves and spikes of tubular red flowers. Thrives near water and in sun to semi-shade conditions. Prune hard post flowering.

Scrophulariaceae

**Pycnostachys reticulata**

Stekelsalie

A small upright resprouting herbaceous shrub with lovely soft pale blue-purple flowers in autumn. Good mixed border plant in full sun. Prune hard after flowering.

Lamiaceae

600 mm

**Pycnostachys urticifolia**

Herbaceous shrub, conical spikes of blue, mauve or

Lamiaceae

2.5 m

white flowers in autumn, prune hard after flowering,  
sow spring.

### **Rabdosiella calycina**

Erect herb, aromatic, flowers pink, dense clusters at  
ends of twigs, plant in a sunny position, prune during  
winter months.

Lamiaceae  
600 mm

### **Scabiosa africana**

Pincushion

Attractive cushion of tufted leaves, mauve flowers in  
spring and summer.

Dipsacaceae  
900mm

### **Scabiosa columbaria**

A soft clump-forming herbaceous perennial with  
deeply lobed light green leaves. Pale blue, lilac or  
white flowers are produced on slender erect stems.  
A lovely plant for mass planting along a border in full  
sun.

Dipsacaceae

### **Scabiosa incisa**

Wild scabious, Koringblommetjie

A pretty clump-forming perennial with sweet pink or  
blue flowers all year.

Dipsacaceae  
300-800mm

### **Schoenoplectus corymbosus**

An unusual reed-like plant for use in or around water,  
small tufts of brown grass-like flowers are borne at  
the tips of the leaves.

Cyperaceae

### **Selago corymbosa**

Bitterblombos

An upright shrublet with feathery foliage and pretty  
gypsophila-type white flowers.

Selaginaceae  
500 mm

### **Selago galpinii**

Low-growing shrub with masses of lilac flowers in  
spring and summer. Enjoys full sun and ample  
water. Can tolerate frost.

Selaginaceae  
400 mm

### **Selago serrata**

Stout perennial, showy heads of mauve flowers in  
summer, sow autumn.

Selaginaceae  
300-900mm

<b>Selago thunbergii</b> Aarbeibossie Minute white-mauve flowers in spring.	Selaginaceae 600mm
<b>Senecio glastifolius</b> Giant wild cineraria, Waterdissel Showy, large pinkish mauve daisy flowers with yellow centres, in spring, excellent for mixed borders, sow spring, early summer or autumn.	Asteraceae 1.6 m
<b>Senecio halimifolius</b> Tabakbos Yellow flowered, much branched herbaceous perennial or shrub, showy in late spring.	Asteraceae 1m
<b>Senecio tanacetopsis</b> Compact yellow flowered groundcover with attractive grey foliage, suitable for embankments, frost resistant good plant for cold inland gardens.	Asteraceae 400 mm - 600
<b>Silene bellidioides</b> Soft perennial with mainly basal leaves, white flowers in summer, prefers damp situation.	Caryophyllaceae 300-600mm
<b>Silene undulata</b> Wild tobacco, Wildetabak Hairy or sticky perennial or annual, flowers white or pink, spring-summer, sun or light shade, sow autumn or spring.	Caryophyllaceae 150-800mm
<b>Sium repandum</b> Tandpyrwortel Attractive waterside plant with interesting foliage.	Apiaceae 500 mm - 1 m
<b>Stachys linearis</b> Vaaltee Erect or spreading woody perennial, flowers pink to purple in summer.	Lamiaceae 200-400mm

## Streptocarpus

Gentianaceae

These plants which belong to the same family as African violets, have long been grown as pot-plants in hothouses. They are soft, shade loving plants with very pretty trumpet shaped flowers in a range of colours. Streptocarpus can be divided into groups with three different growth habits.

### Those without stems:

The largest group of *streptocarpus* have rosettes of velvety green leaves. Numerous flower stems grow from the base producing sprays of large flowers in succession throughout the summer. This group is the best known and species such as *S. rexii* have been used to breed the modern hybrids.

Secondly a very interesting group, the unifoliate which only produce one or two very large leaves. These plants die after flowering.

### Those with stems:

Thirdly a group of multi-stemmed plants such as *S. caulescens* and *S. saxorum* which have much smaller leaves and flowers.

Streptocarpus have long cylindrical fruits which untwist spirally, as they ripen, to release the small black seeds. The plants seed themselves freely in moist soil and flower in from 4 - 6 months under ideal conditions. Seed may also be sown in pots in very early spring, about August. Warmth during the early stages will hasten growth.

## Streptocarpus candidus

Gesneriaceae

Vigorous grower, large pale mauve flowers with deep pink centre, good pot plant or bedding plant in a sheltered, shady position.

## Streptocarpus cyaneus

Gesneriaceae

Stemless herb, large leaves, beautiful dark purple flowers in summer, a good potplant or bedding plant, shade-loving.

## Streptocarpus fasciatus

Gesneriaceae

Vigorous rosette-forming plants with mauve or white flowers in autumn, good pot plant or garden plant, require shade.

## Streptocarpus formosus

Gesneriaceae

An attractive plant with leaves in a rosette and large mauve flowers in summer. Suitable for containers or in a well drained shady position.

## Streptocarpus gardenii

Gesneriaceae

Soft herb, strap shaped leaves in a rosette, flowers whitish-green with violet markings, late summer, shade loving, good pot plant and garden plant. Sow spring on

surface of soil, under glass, keep out of direct sun and do not overwater.

**Streptocarpus hilsenbergii**

Upright, branched herb with showy mauve flowers in spring, shade-loving.

Gesneriaceae  
200 mm

**Streptocarpus johannis**

Stemless herb with masses of light blue flowers in spring and summer, good potplant or bedding plant, shade-loving, sow spring.

Gesneriaceae

**Streptocarpus polyanthus**

Interesting herb with thick leaves, pale blue flowers in spring and summer, shade-loving, do not overwater.

Gesneriaceae

**Streptocarpus polyanthus subsp. comptonii**

Interesting perennial herb with 1 - 2 mm thick leaves, small white flowers from spring to summer, sow spring, shade loving, do not overwater.

Gesneriaceae

**Streptocarpus primulifolius**

A striking plant with large leaves, very floriferous bearing dark mauve flowers, a good potplant or bedding plant in a shady spot.

Gesneriaceae

**Streptocarpus primulifolius subsp. formosus**

A striking plant with large leaves, very floriferous bearing large light mauve flowers, a good potplant or bedding plant in a shady spot.

Gesneriaceae

**Streptocarpus primulifolius subsp. primulifolius**

Stemless herb, long velvety leaves and dark purple flowers in summer, good pot plant or bedding plant, shade-loving.

Gesneriaceae

**Streptocarpus rexii**

Vigorous plants, flowers variable in colour, size and number, usually large mauve in summer, good potplant or for garden, requires shade. Sow spring on surface of soil, under glass, keep out of direct sun and do not overwater.

Gesneriaceae  
150 mm

**Streptocarpus saxorum**

Mauve flowers, dappled shade, suitable for pot plant.

Gesneriaceae

**Streptocarpus stomandrus**

Fast-growing branched herb, flowers small, white with maroon streaks, summer, semi-shade.

Gesneriaceae  
200 mm

**Streptocarpus thompsonii**

Gesneriaceae

Fast, upright growing herb from Madagascar, dark purple flowers in winter, shade-loving.

**Streptocarpus vandeleurii**

Gesneriaceae

An interesting plant with a large single leaf and a spray of cream coloured flowers in summer. Suitable as a container plant.

**Streptocarpus wendlandii**

Gesneriaceae

Beautiful herb with one large leaf of which the lower surface is rich beetroot-red, mauve flowers in summer, shade-loving, sow spring-summer.

**Sutera aurantiaca 'Knysna Hills'**

Scrophulariaceae

Low growing ground cover with fine leaves and masses of small pink flowers in spring and summer. Plant in full sun position, in well drained soil.

**Sutera campanulata**

Scrophulariaceae

White phlox

A fast-growing groundcover with masses of white flowers throughout the year. Leaves are attractive, round and bright green. Plant in full sun or semi-shade in compost-enriched soil.

**Sutera cordata**

Scrophulariaceae

Trailing ground cover, covered in starry white flowers all year. Thrives on regular watering and feeding in sun or shade. Stunning in hanging baskets.

**Syncarpha argentea**

Asteraceae

Silvery leaved everlasting with rosy to white flowers in winter.

450mm

**Syncarpha argyropsis**

Asteraceae

Small shrublet with silver foliage, covered with white and pink papery flowers in spring, full sun and well-drained soil.

600 mm

**Syncarpha paniculata**

Asteraceae

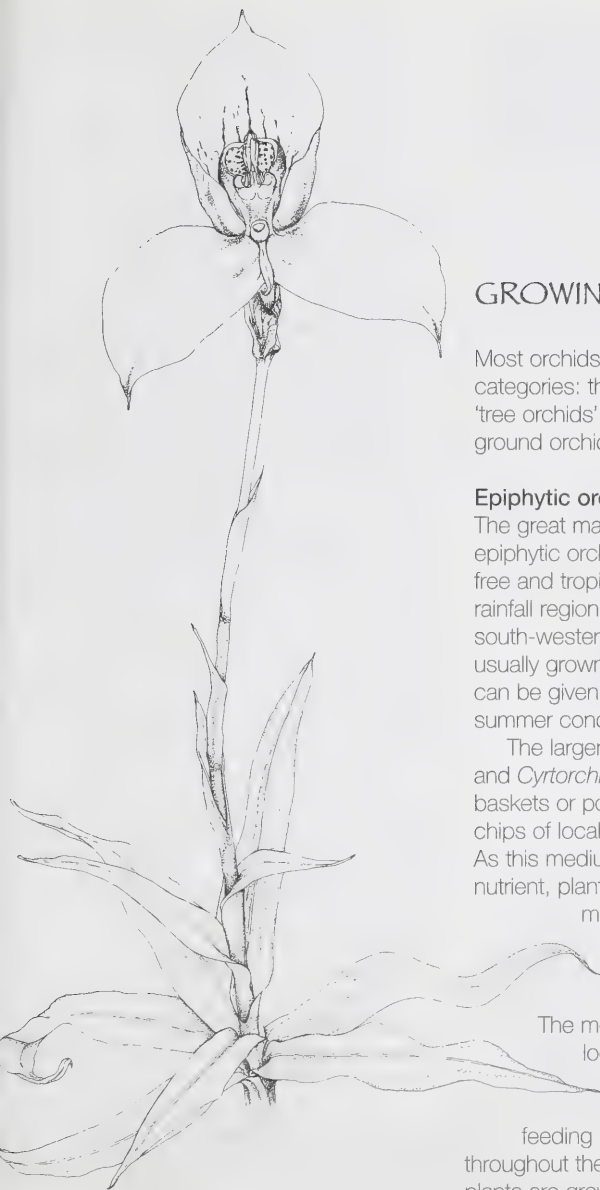
Sewejaartjie

Shrublet, attractive grey foliage, white flower with yellow centre, November to February, can be used as dried flowers, full sun.

500 mm

<b>Syncarpha speciosissima</b>	Asteraceae
Cape everlasting	
Sprawling shrublet, white everlasting flowers in winter - summer, sow autumn.	200-500mm
<b>Syncarpha vestita</b>	Asteraceae
Everlasting, Sewejaartjie	
Robust, woolly herbaceous shrub, large white flowers, November to January.	1m
<b>Syncolostemon eriocephalus</b>	Lamiaceae
Upright shrub with grey leaves, white flowers in spring, full sun.	
<b>Syncolostemon macranthus</b>	Lamiaceae
Erect shrub with pink flowers, autumn, prune during winter, suitable for sunny gardens, sow summer.	
<b>Syncolostemon rotundifolius</b>	Lamiaceae
Rounded shrubby perennial, spikes of pink salvia-like flowers in summer, hot sunny conditions, sow spring.	1.5m
<b>Tetradenia riparia 'Elize'</b>	Lamiaceae
Misty plume bush, Gemmerbos	
Lilac flowers June to August, aromatic, deciduous foliage, hardy, prune late winter.	2m
<b>Thaminophyllum latifolium</b>	Asteraceae
Aromatic, spreading herbaceous perennial or small shrub, attractive white flowers with pink or purple reverse, attractive, suitable for damp places in a fynbos garden.	300-750mm
<b>Thunbergia natalensis</b>	Acanthaceae
Herbaceous perennial with attractive sky blue flowers with yellow centre, light shade, dormant in winter.	500 mm
<b>Ursinia abrotanifolia</b>	Asteraceae
Attractive grey foliage, ideal groundcover, semi-shade or sun.	500 mm
<b>Ursinia dentata</b>	Asteraceae
Erect shrublet with yellow flowers, showy, suitable for fynbos or wild gardens.	500mm
<b>Ursinia paleacea</b>	Asteraceae
Geelmagriet	

Herbaceous shrublet, yellow daisy flowers in summer, prefers damp habitat.	250-900mm
<b>Ursinia sericea</b> Attractive, silvery fine foliage, good groundcover in sun, yellow daisies on long stems.	Asteraceae 500 mm
<b>Vernonia myriantha</b> A showy multistemmed shrubby perennial with large leaves and large heads of mauve flowers in April to June. A warm sunny position with good soil and free drainage. Prune hard after flowering.	Asteraceae 2 m
<b>Vernonia natalensis</b> Beautiful silver leaves, mauve flowers in summer, dormant in winter, sow spring.	Asteraceae 1.5 m
<b>Vigna vexillata</b> Herb, slender trailing or twining stems from a tuberous rootstock; leaves trifoliate, sparsely covered with hairs; inflorescence stalk erect to 300mm long with 1 or 2 pale pink-mauve 'pea' flowers in spring-summer; pods covered with coarse hairs.	Fabaceae 300mm
<b>Wahlenbergia rivularis</b> Soft herbaceous perennial with a low mounding growth habit. It grows actively during the warm months and is adorned with lovely large white flowers in summer. A quick growing plant that is a useful bedding plant or for mixed containers.	Campanulaceae
<b>Wahlenbergia undulata</b> Masses of light blue Campanula-like flowers in summer, undulate leaves, sow in spring, attractive garden subject.	Campanulaceae 400mm
<b>Walafrida nitida</b> A small shrub, with mauve flowers all year round. A hardy plant that attracts butterflies to the garden. Plant in full sun or light shade.	Selaginaceae 400 mm
<b>Zaluzianskya katharinae</b> Evening phlox, Drumsticks Perennial herbaceous shrublet. Fragrant, attractive flowers, pink below, white above, open in late afternoon in summer. Full sun or light shade in well drained soil. Occurs naturally on Witwatersrand.	Scrophulariaceae 300 mm



Catherine Handforth

## GROWING ORCHIDS

Most orchids fall into two main culture categories: the epiphytic or so called 'tree orchids' and the terrestrial or ground orchids.

### Epiphytic orchids

The great majority of the South African epiphytic orchids come from the frost free and tropical areas of the summer rainfall region. Consequently, in the south-western Cape these orchids are usually grown under glass so that they can be given dry winter and moist summer conditions.

The larger genera such as *Ansellia* and *Cyrtorchis* are usually grown in baskets or pots in a compost of large chips of local pine or imported fir bark. As this medium contains little or no nutrient, plants growing in such a

medium have to be fed during the growing season at weekly intervals with a dilute nutrient fertilizer.

The most commonly used is a local fish emulsion product at a dilution of 1 tsp. to a 5 l of water. This

feeding programme is carried out throughout the summer months when the plants are growing.

The less vigorous angraecoid species of *Aerangis*, *Angraecum*, *Tridactyle* and *Mystacidium* are satisfactorily grown on slabs of cork bark or on pieces of tree fern. The various species of *Polystachya* can be grown satisfactorily either on cork slabs or on shallow pans with medium grade bark chips. Similarly, the species of *Bulbophyllum* seem to grow best on cork slabs. The light intensity under which some of the species are grown may be of importance to ensure proper flowering. For example, very light shading can be given to ansellias whereas *Aerangis mystacidii* requires fairly heavy shade.

### Terrestrial orchids

Terrestrial species occur in both the winter and summer rainfall areas, and subsequently attention must be given to the proper growing and resting seasons in each particular case.

Among the species of the summer rainfall area there are a few species of *Eulophia* which grow well in cultivation. Probably the most frequently grown is the yellow flowered evergreen *Eulophia speciosa*, which is best grown in a sandy compost and, like other eulophias, benefits from supplementary feeding during the growing season. It is advisable to give this species only light shading, otherwise the flower spikes elongate considerably, to its detriment as a show subject. The yellow and brown flowered *E. streptopetala* prefers 50% shade and a compost of equal parts of coarse humus and coarse sand. Another species sometimes grown is the leathery-leaved *E. petersii* with pseudo-bulbs above the ground, which is a dry-country plant and requires a well-drained poor sandy compost and high light intensity in

order to produce perfect flowers. Another easily grown large flowered species is *Bonatea speciosa*. It is best grown in a sandy humus-rich compost with supplementary feeding of weak liquid manure during the growing season. Other attractive reasonably easy to grow species that also appreciate fairly deep shade are the lilac flowered *Calanthe sylvatica* and the pale pink spotted *Stenoglottis longifolia*. As can be expected from their habitat, this group requires a cool dry rest during the winter.

Among the winter rainfall species, the deep pink flowered *Satyrium carneum* and the orange flowered *S. coriifolium* are reasonably easy to grow in winter rainfall areas. They both prefer a sandy compost and can be fairly heavily fed with a dilute liquid during the winter growing season. They must have a prolonged dry summer rest.

Without doubt the most spectacular terrestrial orchid in the winter rainfall area is *Disa uniflora*. Its basic requirements are a very freely draining coarse sandy compost and cool humid conditions throughout the spring and summer. The streamside *Disa tripetaloides* and the marsh dwelling *D. racemosa* do not exhibit such critical requirements of free drainage as does *D. uniflora*.

### Pests and diseases

Orchids in cultivation are prone to a variety of pests and diseases and the epiphytic orchids and evergreen terrestrial orchids are liable to infections by brown or ringspot scale. These can be kept under control with regular spraying with an insecticide such as Malathion at the recommended dilutions. If plants are grown in too dry an

atmosphere thrips and red spider mite can also cause damage to the under-surface of leaves, which take on a silvery appearance. Slugs and snails can do considerable damage to young growing root tips and also to the large fleshy leaves of the larger satyriums. In the latter case, strict control is required if plants are to be placed on the show bench. Fungal diseases are normally not a great problem, except in the case of *Calanthe sylvatica* which is very susceptible to gleosporium fungus under greenhouse conditions and it should be regularly sprayed at monthly intervals with a fungicide such as Kaptan to keep the foliage unblemished.

### Seed sowing

The sowing of orchid seeds involves rather special techniques. Propagating the plants using tissue culture methods

have proved most successful. The seed pod is picked at the 'green pod' stage shortly before the seed ripens. The pod is sterilized in a 30% bleach solution and then cut open in a sterile environment. The seed is then transferred aseptically to a sterile nutrient medium containing sugars, minerals and vitamins in an agar base. The plants are grown on in a controlled, sterile laboratory environment (i.e. free of bacterial and fungal contaminants) for many months until the seedlings are large enough to transfer out of the flask and onto normal compost. The conventional method of sowing fresh seed directly onto mats of living sphagnum moss works well for most of the winter-rainfall disas. When the seedling leaves are 1 to 2 cm long, tufts of the moss containing a small number of seedlings can be potted up into individual pots

## Orchids

### Bonatea sp.

Flowers green and white, fragrant, October to November, semi-shade, coastal bush, well drained soil.

Orchidaceae  
900mm

### Bulbophyllum scaberulum

Epiphytic orchid, easily grown on slabs of bark or potted in granite under lightly shaded humid (not wet) conditions, flowers October to December, must be fed with organic food 1/8 normal strength.

Orchidaceae

### CULTIVATION OF DISA UNIFLORA

Disas are cool growing and should be kept in an environment where temperatures range from 10 to 25 °C, although lower temperatures for short periods are not harmful. During the summer flowering months, disas will

tolerate temperatures above 30 °C, provided that they have adequate moisture, humidity and free air movement. Disas grow better in lower light intensities - 50% shade is ideal. Light intensity should be increased during the winter months.

## Seed sowing

- Fresh seed should be sown on a medium of either washed Irish peat-moss or sphagnum moss.
- Half fill a 13 cm plastic pot with coarse, washed river sand and place a 1 cm layer of peat or sphagnum over this.
- Sow the seed evenly and lightly spray the entire surface with a suitable fungicide, e.g. Kaptan.
- The pot should be covered with clear plastic and held firmly in place with an elastic band.

## Germination

The seed should begin to germinate after 4 weeks, but be sure to inspect the medium regularly for signs of fungal infection. A weekly spray with a suitable fungicide is a good precaution. The young seedlings grow slowly during the first year and begin to put on growth only as autumn approaches. The year-old seedlings may then be pricked out into a fresh medium consisting of equal parts coarse river sand and peat. The plastic covering may be removed at this stage.

## Raising seedlings to maturity

Growth is more rapid during the second year and by the third year the first flowers develop. The mature plants must be repotted each year, preferably during autumn, when the flowering plant dies back and a new tuber and shoot begin to appear. When the new shoot is well developed, repot and discard the dying parent plant. All dead and decaying material must be removed and the roots washed thoroughly. However, if you feel that a plant is not doing as well as it should, repotting into fresh medium at

any time of the year usually works wonders.

## Repotting into a suitable medium

Many different media and combination thereof have been tried with a greater or lesser degree of success.

Plants have, however, been grown successfully for many years in a mixture of one part washed Irish peatmoss or palm fibre to nine parts washed coarse river sand (particle size 1-2 mm).

Prepare a 12 cm (5i) plastic pot by placing polystyrene chips or coarse pebbles in the base to ensure good drainage.

Hold the plant in the centre of the pot and pour in the potting medium until all the roots are completely covered.

Place a layer of coarse stone chips over the entire surface. This reduces algal growth and prevents the medium from being disturbed during watering. The medium must have free drainage.

## Watering

The roots must never be allowed to dry out, but over-watering and soggianness must also be avoided. Ordinary tap water is fine provided it is not too-heavy chlorinated. It is advisable to stand the water in a bucket overnight to allow most of the chlorine to evaporate. If one has a source of river or bore-hole water, so much the better. The pH of the water supply should be checked, the ideal is between 5.5 and 6.5.

## Feeding

Disas should be fed regularly throughout the growing season (i.e. August to March) with a diluted balanced fertilizer. Commercially available orchid balanced

fertilizer should be sufficient. Organic fertilizer such as Seagro may also be used. If chlorosis (yellowing), blotching and stunting begins to appear, trace elements (Trelmix) must be applied as directed until the symptoms disappear. A rest period is recommended during the cold winter months when no active growth takes place.

**Hygiene**  
Remove all decaying or dying leaves and periodically drench the plant with a fungicide. These hints have been condensed but, strictly followed, your success rate should be high.

**Disa ‘Kewensis’** Orchidaceae  
Pink flowering hybrid of medium size, parentage: Disa uniflora x Disa tripetaloides.

**Disa ‘Kirstenbosch Pride’** Orchidaceae  
A lovely hybrid of Kirstenbosch’s own from D. uniflora and D. cardinalis, 3-8 red flowers, medium size.

**Disa atricapilla** Orchidaceae  
Flowers white, red and black, seasonal marshes on flats and slopes, mostly after fire. 250-300mm

**Disa cardinalis** Orchidaceae  
Flowers red, December to March, terrestrial orchid on moist stream banks. 300 - 400 mm

**Disa glandulosa** Orchidaceae  
Terrestrial orchid; flowers pink with red spots, mid summer; occurs on wet cliffs or marshes. 60-200mm

**Disa racemosa** Orchidaceae  
Flowers pink, October to December, terrestrial orchid from peaty marshes, not easy to grow.

**Disa sagittalis** Orchidaceae  
Robust plant, white flowers, occurs along rocky streamsides, a 2-3 month dormancy period starts soon after flowering, during this period the plant requires water only once a week. 300 mm

**Disa tripetaloides** Orchidaceae  
Terrestrial orchid on moist stream banks; flowers white to pink, 15mm across, November to January. 200mm

<b>Disa uniflora</b>	Orchidaceae
Pride of Table Mountain, Rooibos	
Large pink to red flowers during late summer rarely yellow; occurs on moist stream banks, marshes and wet cliffs in south-western Cape; sow in late summer - autumn on surface of sowing medium of boiled sphagnum moss or agar jelly.	
<b>Disa veitchii</b>	Orchidaceae
Attractive pink hybrid. Parents <i>D. uniflora</i> x <i>D. racemosa</i> .	500 mm
<b>Disa venosa</b>	Orchidaceae
Flowers pink, 30mm across, December to January, terrestrial orchid on moist stream banks.	200mm
<b>Eulophia ovalis</b>	Orchidaceae
Flowers purple to green and white or yellow.	150-500mm
<b>Eulophia petersii</b>	Orchidaceae
Terrestrial xerophytic orchid, large pseudobulb, pink flowers, summer, sow spring-summer, easily cultivated in full sun or semi-shade, water sparingly in summer, keep dry in winter, good container plant.	
<b>Eulophia speciosa</b>	Orchidaceae
Terrestrial orchid; flowers golden yellow, mid winter to late summer; occurs on coastal flats.	400-600mm
<b>Eulophia streptopetala</b>	Orchidaceae
Terrestrial orchid; flowers yellow, green and to purplish-brown, spring to late summer; occurs in coastal bush in eastern Cape.	1m
<b>Eulophia tuberculata</b>	Orchidaceae
Flowers yellowish-green, purple, white and reddish, open flats and slopes.	150-400mm
<b>Polystachya pubescens</b>	Orchidaceae
Epiphytic orchid, can tolerate quite harsh conditions but optionally prefers light shaded humid conditions, can be grown on a slab of bark or potted in granite, yellow flowers in spring, feed with organic fertilizer 1/8 normal strength.	

## **Satyrium carneum**

Rooitrewwa

Pink flowers in spring, summer and winter, seed is best sown in a yeast extract medium with a pH of about 7.

Orchidaceae

1 m

## **Stenoglottis longifolia**

Robust plant with many linear-shaped leaves arranged in a dense rosette, erect inflorescence, bearing up to 80 mauve to lilac flowers, with darker spots on all parts of the flower.

Orchidaceae



H. J. H. H. H. H.



## GROWING

### PELARGONIUMS

Our indigenous species of *Pelargonium* have played a vital role in the development of the ornamental hybrid pelargonium (or geranium as it is commonly but incorrectly known). The introduction of southern African pelargoniums into Europe began in the early 17th century, with *Pelargonium triste* being one of the first. But it was not until the last decade of the 18th century that pelargoniums became popular. William Curtis noted in 1790 that pelargoniums 'show an astonishing readiness to cross and set seed', and this probably marked the beginning of the hybrid pelargonium. Though popularity has fluctuated with time, the variety and ease of propagation have made the pelargonium a garden favourite.

### PROPAGATION

Pelargoniums are easy to propagate from seed or by vegetative means.

#### **Vegetative Propagation**

##### *Stem cuttings*

Stem cuttings are the most widely used method of propagating pelargoniums. Plants produced this way will flower within 3-6 months as compared to 12-18 months when grown from seed.

Cuttings may be taken all year round although they will root faster during summer and autumn. They should be taken from the terminal growing points of the plants, though lower pieces of stem may also be used. The parent plant should be strongly growing and not lanky or diseased. Ideally the internodes should be short and the stem fairly firm but not woody. The cutting should contain at least 3-5 leaf nodes and the basal end should be cut neatly just below a leaf node. The leaves and stipules should be carefully removed from the lower two thirds of the cutting leaving a few leaves intact on the top. If the leaves are large, a portion can be trimmed off to reduce moisture loss e.g. *P. zonale* and *P. inquinans*. However, leafless cuttings of the succulent and woody species will root with equal ease.

The cuttings should be rooted in trays containing any well-drained medium, e.g. sand covered with a 5 mm thin layer of bark and polystyrene. A rooting hormone such as Seradix no. 2 can be used to improve rooting.

The basal tip of the cutting should be dipped in hormone, the cuttings set out in holes in the rooting medium (made using a dibber or a six inch nail) and the medium should then be pressed firmly around the cutting. The completed tray of cuttings should be watered with a fungicide such as Kaptan. If possible, the cuttings should be placed under mist with bottom heat for 3 or 4 days to give them a chance to settle, then put into a cold frame for the remainder of the rooting period. The cuttings should be watered regularly, and care taken not to over-water. Four to 8 weeks later, after root formation, a feed with Kelpak (or

another seaweed extract product) is recommended. One to 2 weeks after this, the cuttings can be potted up.

### Division

Many of the South African pelargoniums are tuberous with either a very short stem or none at all. These species do not lend themselves to the normal vegetative methods of propagation. The tubers that multiply can be divided and planted individually. This method is applied to species such as *P. incrassatum*, *P. pulchellum* and *P. triste*. Unfortunately it is a slow process and is not practical if large quantities of plants are required quickly.

### Seed

The seed of the pelargonium is interesting in that attached to the elliptically-shaped seed is a feathered tail-like structure which is coiled in a spiral arrangement. This tail causes the seed to twist around in the wind and the movement of plants and animals, so that it drills itself into the soil in a corkscrew fashion, thus ensuring that most of the seeds produced (5 seeds per flower) have a good chance of germinating.

For optimum germination, seed is best sown when fresh although it may remain viable for up to 7 years.

Sow seed in a light well-drained soil with a high content of coarse sand. A seed tray 100 mm deep with numerous drainage holes in the base, is ideal. Before filling the container, place a layer of roughage of crocks or gravel in the bottom. Firm down the soil gently after leveling off with a plank. After watering, broadcast the seed evenly and cover with a layer of clean white sand. Depth of

sowing is usually 1.5 times the size of the seed. Finally, water thoroughly using a fine rose and provide light shade.

Germination usually takes place within 10-14 days, but may be longer if the temperatures are low. The seedlings can be pricked out into individual containers once they have produced 2 or 3 leaves.

Pelargoniums grown from seed are generally more vigorous and robust than those produced from cuttings. However, plants produced from seed take longer to flower and may also display a certain amount of variation. This latter characteristic may prove to be desirable if variation is required for selection of superior plant types.

For the geophytic species propagation by seed is the most effective way of producing large numbers of plants. Many of these seedlings will flower within their first year e.g. *P. oblongatum* and *P. incrassatum*.

## CULTIVATION

Pelargoniums are found over most of South Africa in a wide range of habitats, so it is impossible to lay down one set of growing conditions to suit all species. The most important consideration is to note the species' natural habitat, the soil type, the amount of shading, how much rain and when it falls, and then to attempt to simulate natural conditions as closely as possible. Many species have wide tolerance limits and are therefore easier to grow. .

The basic requirements for growing pelargoniums are good drainage, plenty of light and abundant free air circulation.

### Soil

Good sandy loamy soil will suit most

pelargoniums. The soil pH is not a critical factor, and a neutral to slightly acidic pH is suitable for most species. The Kirstenbosch pot collection is growing successfully in a mix of 1 part loam, 2 parts sand and 2 parts compost plus fertilizer. Soilless media can be used for pot culture.

### Light

Contrary to popular belief, light shade or full shade for part of the day is of benefit to most pelargonium species in South African conditions. In their natural environments they are found growing in the shelter of bushes or rocks where even if the leaves are exposed, the roots are cool. None of the species grow successfully in heavy shade, as under these conditions they become very spindly.

### Watering

Watering is the most critical factor in controlling the growth conditions of pelargoniums. The amount and frequency of watering depends on the growth medium, climatic conditions, the species requirements and if applicable, the type of container. A general rule of thumb is to only water when dry, as under-watering is preferable to over-watering. For ease of watering it is simpler to group the species according to growth habit.

## GEOPHYTIC SPECIES

Geophytic species which have underground storage organs and are seasonally dormant. These in turn need to be subdivided into winter rainfall species e.g. *P. rapaceum*, *P. triste*, *P. lobatum* and *P. incrassatum* or summer

rainfall species e.g. *P. bowkeri*, *P. schizopetalum*, *P. luridum* and *P. caffrum*. These species require regular water during their growing season but must not be over-watered or the tubers will rot. In their dormant season they require no water and if the storage organ is wet it will rot. Dormant plants can either be stored in their pots preferably in a cool place or can be lifted, treated with fungicide and stored in a cool dry place, in the same way as bulbs. Excessive heat and desiccation will damage the dormant plant, so if it is not possible to store the pots in a cool place they can be cooled by lightly dampening, but not soaking, the surface of the pot.

## SUMMER DORMANT SUCCULENT & WOODY SPECIES

Succulent and woody species which are dormant or semi-dormant in summer come mainly from the Karoo and more arid areas. They include *P. carnosum*, *P. crithmifolium*, *P. praemorsum*, *P. antidysentericum* and *P. cortusifolium*. These species need a well drained medium and must not be over-watered as they are prone to rot. It is advantageous to plant these plants shallowly in their growth medium with a layer of grit on the surface for support as this reduces the chances of rot at the soil surface. Water only when completely dry at all times of the year.

## EVERGREEN SPECIES

Herbaceous evergreen species which grow all year and come from the south-western and southern Cape include *P. cordifolium*, *P. fruticosum*, *P. cucullatum*, *P. panduriforme* and *P. betulinum*. These species require regular water to maintain

optimal growth but must not be waterlogged. Most of these plants are drought tolerant but will not look their best under these conditions.

## Pruning

Pruning is essential for the vigorously growing species like *P. denticulatum*, *P. glutinosum*, *P. scabrum*, *P. capitatum* and *P. graveolens*. The plants can be cut back about two thirds to just above a node and any weak growth should be removed. The best time to prune is from late summer to early autumn, which gives the plant time to grow again before winter. If healthy, the prunings can be used for cuttings.

To encourage bush formation, it is a good practice to pinch out the growing tip of newly potted cuttings. Vigorous species like *P. inquinans*, *P. salmoneum*, *P. frutetorum*, *P. burtoniae* and *P. grandiflorum* can be pinched back regularly during their first year.

The succulent and geophytic species do not require pruning except possibly to improve shape or remove diseased areas. Dead leaves of geophytic species should be cut off, not plucked, as the leaf base protects the growing tip from desiccation and damage.

## Feeding

Feeding of potted plants with a balanced fertilizer every tenth watering, when in active growth, is recommended. Some references suggest more regular feeding especially when the plants are growing in a soilless medium. Care must be taken not to overfeed as this can result in lush growth which is prone to disease or a high salt build-up in the pot medium which has toxic effects. Plants in the

garden should be fed at the beginning of their growing season with a balanced slow-release fertilizer.

### Potting on

Potting on is the moving of a vigorously growing plant to a larger container. This must be done before the plant is root-bound and must be carried out with the minimal disturbance to the roots so that growth is not stopped.

### Repotting

Repotting involves removing the old exhausted medium from the root ball and repotting the plant in the same size container. During this process geophytic species may be divided. Roots should be washed clean and any damaged or diseased roots removed, and they may be treated with fungicide before repotting. In the case of the herbaceous evergreen species it is advisable to prune the top of the plant as well to compensate for root loss.

### Use of pelargoniums

Pelargoniums are a versatile group of plants that can fill many different roles.

In the garden, as long as they are well drained, they are quick growing and rewarding plants, offering interesting foliage and in many cases, showy flowers. The larger species can be used as quick growing shrubs, e.g. *P. papilionaceum*, *P. citronellum* and *P. cucullatum*. The floriferous smaller species make good bedding plants which, in very harsh areas, can be replanted annually, much in the same way as the cultivars are treated in Europe, e.g. *P. inquinans*, *P. tongaense* and *P. peltatum*. A herb garden is

enhanced by the addition of scented pelargoniums e.g. *P. tomentosum*, *P. crispum* and *P. graveolens*. A well drained rockery would provide a suitable home for the more succulent species e.g. *P. magenteum*, *P. ionidiflorum* and *P. fulgidum*. The geophytic species may be used in the same way as bulbs either in mass displays or in rockery pockets e.g. *P. oblongatum*, *P. incrassatum* and *P. auritum*. All the smaller, succulent, scented and geophytic species make good pot subjects for the veranda, patio or windowsill. Make sure that the species chosen is placed in a position that it can tolerate - whether it be full sun or partial shade.

### Pests and diseases

While pelargoniums are regarded as tough plants, they are not totally without their problems. Many grow happily in the open, free of disease, but when the same plant is grown indoors or in a glass house, the warmer conditions and lack of free air circulation encourage the appearance of many pests. At this stage the application of pesticide will become necessary. The following table lists the major pests, their symptoms and control.

PEST	SYMPTOMS	CONTROL
Aphids	Small green insect, winged or wingless, attacks stem tips sucking plant saps, causing wilt.	Pirimor, Malathion Ripcord
Caterpillars	Various species, chewing leaf margins, droppings evident	Karabaspray, Malathion
Red spider mite	Visible as tiny red dots on leaves. Turns leaves mottled, yellow and shriveled	Garden Gun Malathion,
Snails	Chew shallow holes in fleshy pelargoniums, slime trail evident	Any snail bait
Whitefly	Small white,,winged insect on underside of leaves, sucking sap, causing leaf to curl	Ripcord, Garden Gun and yellow sticky traps
FUNGI	SYMPTOMS	CONTROL
Rust	Brown spots on underside of leaf, yellow spotting on upper surface	Cupravit, Koprox,, Biltex, Funginex, Dithane
Powdery mildew	Whitish powdery growth on leaves	Benlate, Funginex, Copper-oxy-chloride, dust with Flowers of Sulphur
DISEASES	SYMPTOMS	CONTROL
Oedema	Over-watering Swelling and splitting of stems, creating an entry site for disease	Reduce frequency of watering.

**FURTHER READING**

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**Pelargoniums**

<b>Pelargonium ‘Fragrans’</b>	Geraniaceae
Strongly aromatic grey foliage, numerous small white flowers, a good hardy garden subject.	400mm
<b>Pelargonium ‘Rose-scented’</b>	Geraniaceae
An attractive vigorous hybrid with divided velvety rose-scented leaves, has plentiful white-pink flowers in spring.	750mm
<b>Pelargonium abrotanifolium</b>	Geraniaceae
Woody, strong grower, pink to mauve flowers all year, dry position.	400mm
<b>Pelargonium alchemilloides</b>	Geraniaceae
Wilde malva	
Sprawling perennial, white to pale rose flowers all year.	300mm
<b>Pelargonium alternans</b>	Geraniaceae
A rounded branched succulent shrub with small white flowers. Suitable for containers and dry winter rainfall rockeries.	150 mm
<b>Pelargonium betulinum</b>	Geraniaceae
Maagpynbossie	
A showy rounded bush, with white to magenta flowers in spring. Makes attractive bedding displays.	500mm

<b>Pelargonium caucalifolium</b>	Geraniaceae
Spreading groundcover with showy pale pink flowers, hot dry position.	500mm
<b>Pelargonium citronellum</b>	Geraniaceae
Lemon-scented pelargonium	
A large much branched shrub with attractive strongly lemon-scented leaves and showy pink flowers. Plant in a lightly shade position.	2m
<b>Pelargonium cordifolium</b>	Geraniaceae
Beautiful heart-shaped leaves and showy pink flowers make this an ideal plant for mixed borders and rockeries that receive all year water.	1m
<b>Pelargonium cordifolium 'Valentine'</b>	Geraniaceae
A vigorous herbaceous shrublet that is notable for its lovely heart-shaped leaves and deep red stems. Large pink flowers produce a splendid show from spring to early summer. Suitable for full sun to light shade. Composted well drained soil.	750 mm
<b>Pelargonium cordifolium x ternatum</b>	Geraniaceae
A natural hybrid with small heart-shaped leaves and an upright growth habit. Scattered pink flowers are found throughout the year.	500mm
<b>Pelargonium cotyledonis</b>	Geraniaceae
A sparsely branched shrublet with heartshaped leathery leaves and pure white flowers. Deciduous in summer, extremely rare, good bonsai subject, needs well drained soil, water frugally.	0.3-1m
<b>Pelargonium crispum</b>	Geraniaceae
Small erect shrub with small closely packed lemon-scented leaves, pink flowers in spring to summer.	0.3 mm
<b>Pelargonium cucullatum</b>	Geraniaceae
Wildemalva	
Vigorous fast-growing shrub with large rich purple-pink flowers, spring to summer, an ideal fynbos filler.	1.6m
<b>Pelargonium cucullatum subsp. cucullatum</b>	Geraniaceae
Wildemalva	
Vigorous fast-growing shrub, leaf with jagged edge and a red margin, flowers cerise, spring to summer, an ideal fynbos filler.	1.6 m

<b>Pelargonium cucullatum subsp. tabulare</b>	Geraniaceae
Wildemalva Vigorous fast-growing shrub, large rounded scented leaves, flowers cerise, spring to summer, an ideal fynbos filler.	1.6 m
<b>Pelargonium denticulatum</b>	Geraniaceae
Much branched, strongly aromatic, with sticky, finely divided leaves, pinkish to purple flowers.	1 m
<b>Pelargonium fruticosum</b>	Geraniaceae
Much branched shrublet with a divided leaf, flowers pink.	500 mm
<b>Pelargonium graveolens</b>	Geraniaceae
Aromatic foliage, pale pink flowers in spring.	500 mm
<b>Pelargonium greytonense</b>	Geraniaceae
Compact shrublet with round leaves, white-pink flowers.	500 mm
<b>Pelargonium hirtum</b>	Geraniaceae
Hairy or fine-leaved pelargonium. A robust branched shrublet with fine carrot-like leaves and rose coloured flowers in spring.	300 mm
<b>Pelargonium inquinans</b>	Geraniaceae
Bright red flowers and round leaves makes this traditional plant a must in mixed herbaceous plantings.	750 mm
<b>Pelargonium ionidiflorum</b>	Geraniaceae
A good pot and garden subject with many deep pink flowers, needs a well-drained position in full sun.	250 mm
<b>Pelargonium myrrhifolium</b>	Geraniaceae
Carrot-like foliage, spreading, slender flower spike, good fynbos companion plant.	200 mm
<b>Pelargonium odoratissimum</b>	Geraniaceae
Sweet scented pelargonium Round pale green leaves, sprawling stems, white flowers, aromatic.	300 mm
<b>Pelargonium ovale</b>	Geraniaceae
Cushion forming plant with showy-white to pink flowers, good pot subject or suitable for a well-drained rockery in full sun.	100-150mm

<b>Pelargonium ovale subsp. veronicifolium</b>	Geraniaceae
A compact cushion of narrow serrated grey-green leaves. The showy pink flowers with large well marked back petals turn the plant into a ball of colour in the early summer. Sunny position and well drained rich soil.	150 mm
<b>Pelargonium panduriforme</b>	Geraniaceae
Erect shrub, leaves entire, slightly lobed, aromatic, flowers purple.	1 m
<b>Pelargonium peltatum</b>	Geraniaceae
Ivy-leaved pelargonium	
Trailing, ivy-like leaves, flowers pink.	300 mm
<b>Pelargonium peltatum 'Worcester'</b>	Geraniaceae
Ivy-leaved pelargonium	
This form of the popular Ivy-leaved pelargonium has small well marked leaves and showy pink flowers. Ideal for a hanging basket or mixed planter.	300 mm
<b>Pelargonium quercifolium</b>	Geraniaceae
Oak-leaved pelargonium	
Dark green, scented foliage, mauve flowers, July to October, vigorous shrub.	1m
<b>Pelargonium radens</b>	Geraniaceae
Upright shrub with finely divided sweet-scented leaves and pale pink flowers in early summer.	1.3m
<b>Pelargonium radens x graveolens</b>	Geraniaceae
Upright shrub with large, velvety, finely divided, sweet-scented leaves and pale pink flowers in early summer.	1.3m
<b>Pelargonium radens x vitifolium</b>	Geraniaceae
An attractive, strongly fragrant, upright growing species with divided, furry leaves and bunches of small, pinkish flowers.	800mm
<b>Pelargonium reniforme</b>	Geraniaceae
Kidney-leaved pelargonium	
A cushion-shaped plant with round leaves, magenta flowers are borne most of the year, a good pot or garden subject.	400 mm

<b>Pelargonium scabrum</b>	Geraniaceae
A drought resistant shrub with rough aromatic leaves and pale mauve flowers with dark marks, in early summer.	1m
<b>Pelargonium sidoides</b>	Geraniaceae
Kalverbossie	
Cushion plant with round leaves and dark maroon, night-scented flowers from October to January, peaking in December.	300 mm
<b>Pelargonium suburbanum subsp. suburbanum</b>	Geraniaceae
Rotsmalva	
A sprawling groundcover with showy magenta flowers for most of the year, ideal for banks and rockeries.	200 mm
<b>Pelargonium tomentosum</b>	Geraniaceae
Peppermint scented pelargonium	
A vigorous ground cover with large velvety peppermint-scented leaves and a haze of small white flowers in spring and summer, for sun or semi-shade.	400mm
<b>Pelargonium transvaalense</b>	Geraniaceae
A summer growing species with attractive large leaves that form a cushion and a mass of pink flowers in late summer. Needs to be dry in winter.	200 mm
<b>Pelargonium tricolor</b>	Geraniaceae
A small cushion plant covered in attractive white, mauve or red and white flowers in the late spring. A good pot subject or suitable for Karoo gardens. Requires a warm position, plenty of root space and water when dry. Sow in autumn.	100 mm
<b>Pelargonium zonale</b>	Geraniaceae
Horseshoe pelargonium, Wildemalva	
A fast growing large shrub with erect stems and rounded leaves often with a dark ring marking. Grows from full sun to light shade in a warm position. Pink flowers are found all year with a peak in early summer. Sow in autumn.	1- 1.5m



Jeanette Loedolff



## GROWING

### PLECTRANTHUS

#### CULTIVATION

This very attractive and decorative group of plants shows great potential horticulturally but has unfortunately been rather neglected and very few species are found in gardens. The reason for this can be attributed to their geographical distribution and the inhospitable, well-forested areas where they are often grow out of sight. Consequently, they have remained unknown.

The majority of species are indigenous to the eastern side of the Drakensberg escarpment where they occur in and on the outskirts of forests, in moist, cool to warm summer conditions and frost-free winters. Most species are sensitive to frost which burns their growing tips and leaves. However, in most cases, the plants recover and sprout again in spring.

In the choice of species for a garden, it is very important to take the habitat into account. As the majority of species prefer shade or semi-shade, they are ideal plants for a shady garden. The optimum situation is in the shade of trees and shrubs or the southern or eastern side of buildings or walls. Although some species flourish in full sunlight, northern or western aspects are generally too hot and dry.

*Plectranthus* can be divided into three main categories:

### Groundcovers

The majority of the species are perennial and require some shade. They are fast, strong growers, procumbent or spreading by nature and root easily where stems touch the ground, forming a thick carpet. This keeps the garden neat and attractive, suppresses weed growth and combats erosion. Most species have very decorative leaves and are attractive throughout the year.

#### The following species are recommended:

Shady to semi-shady areas: *P. ciliatus*, *P. praetermissus*, *P. oertendahlii*, *P. zuluensis*, *P. ambiguus* and *P. verticillatus*.

Light shade or sunny areas: *P. mutabilis*, *P. strigosus*, *P. purpuratus*, *P. madagascariensis* var. *madagascariensis*. *P. ciliatus* and *P. oertendahlii* are particularly attractive with purple colouring on the underside of the leaf. *P. madagascariensis* and *P. oertendahlii* have decorative multi-coloured leaves and form useful groundcovers.

### Shrubby species

The shrubby species are fast-growing, erect to spreading plants and are very decorative in mass plantings as well as single plants. They flourish on the southern and eastern sides of houses where they have sunlight for a short period every day. However, the plants grow equally well in light shade under trees, next to shrubs or on the edge of forests. Some species, e.g. *P. ecklonii*, *P. fruticosus* and *P. hadiensis* var. *tomentosus* can also be planted in

almost full sunlight especially in coastal regions.

*P. fruticosus*, *P. ecklonii* and *P. mirabilis* can reach a height of 2-3 m, depending on winter pruning. Their decorative leaves (like the dark purple leaf undersides of *P. fruticosus*) make the plants attractive even without flowers.

### Succulent and Xerophytic species for warm, dry, sunny gardens

This group of drought-resistant plants has been neglected by succulent lovers. There are a number of most attractive and interesting species that will flourish in rock-gardens or in containers in warm dry sunny gardens. Most xerophytic species can be planted in full sun and against inclines where they combat erosion and soften the surroundings.

#### The following species are recommended:

*P. amboinicus*, *P. cylindraceus*, *P. neochilus*, *P. spicatus* and *P. tetensis*, make good groundcovers.'

The shrubby species *P. xerophilus* and *P. hereroensis*, can be cultivated in full sun but will also flourish in light shade. The attractive horticultural forms of *P. cylindraceus*, *P. neochilus* and *P. spicatus* have a very neat and compact growth, with small leaves of highly decorative texture. *P. xerophilus* is a shrubby deciduous species with long clusters of flowers in autumn and is useful as a background.

### Coastal gardens

Generally coastal regions have a very difficult climate for gardening, as many plants are not resistant to salt-laden winds. Fortunately, the majority of

Plectranthus species thrive in coastal regions, and some that require planting in the shade in inland areas (e.g. *P. ecklonii* and *P. fruticosus*) can be planted in full sun in these regions.

*P. madagascariensis* var. *madagascariensis* and *P. verticillatus* can be planted right down to the sea and are able to resist the wind.

## Grouping

Different species or various colour forms of the same species can be grouped together to create a beautiful display. *P. ecklonii* occurs in three colours - bluish purple, pink and white and these can be very striking when planted together. Shrubby species and groundcovers can be grouped together very effectively with the taller species in the background and the spreading groundcovers in the foreground. Large mass plantings are also very attractive in autumn. Matching colours can be grouped together for attractive display. *P. praetermissus* and *P. ciliatus* in particular are very attractive when grouped together, as are *P. mutabilis* and *P. verticillatus* or *P. strigosus*. *P. ambiguus* and *P. zuluensis* also form attractive combinations with many other plants.

## Flowering season and colour

The majority of Plectranthus species are known as short-day plants. As soon as the days grow shorter after summer, a hormone stimulates flowering. The inflorescences usually start developing at the end of February, after which the plants start flowering, reaching a peak in March or April. Certain species ( e.g. *P. strigosus*, *P. saccatus* var. *saccatus*, *P. zuluensis*, *P. verticillatus*, *P. swynnertonii*

and *P. ernstii*) may flower sporadically throughout the year. The colour of the flowers varies from white to dark blue or purple with many shades. Only two species bear yellow flowers, *P. tetragonus* and *P. esculentus*.

## Pruning

It is recommended that the plants are pruned annually or when their appearance becomes untidy. This results in a vigorous growth pattern, an abundance of flowers and lengthening the life of the plant. The plants can be pruned at any time after the flowering season, i.e. in late autumn, winter or just before spring.

Shrubby species like *P. fruticosus* and *P. ecklonii*, need not be pruned back as hard as the low-growing groundcovers. It is not necessary to prune the prostrate groundcovers every year. Only the old, untidy inflorescences have to be removed.

## Fertilization

It is essential to provide enough nutrition to the plants, particularly if the soil is poor. Compost and a little 2:3:2 fertilizer should be added to the soil just before spring and during the plants' growing season. The plants should be well-watered after fertilizer has been applied.

## Plectranthus as a pot plant

Some species do very well as indoor plants, but it is important that they receive the correct treatment. The following must be taken into account: growing-medium, nutrition, air circulation, temperature and water.

The growing-medium is very important and should be porous and of

loose texture for adequate drainage. A suitable potting mixture consists of two parts compost or cattle manure, one part sand and one part loamy soil. About 60 g of bonemeal per wheelbarrow (excellent phosphate nutrition) can be added to the growing medium for optimum growth.

The choice of a container is up to the individual; the size depending on the species cultivated. It is particularly important that there are adequate drainage holes. Roughage, pieces of bark or pebbles must be placed in the bottom of the container to promote drainage. The plant is then placed in the container and soil is firmly pressed down around it. It should then be watered well.

It is important to ensure that the plants are not watered too often or too seldom - the growing medium should be damp at all times. The plants will yellow if too much water is given and wilt if too little is given.

Additional nutrition for the plants is recommended and a balanced liquid fertilizer can be applied every two weeks to stimulate growth; this also contributes towards the plant's resistance to disease.

Although *Plectranthus* are shade-loving, they require adequate light and the position of the pot plant in the house is therefore of importance. It is not advisable to place the plants in a very dark room. The ideal place in the house is near a window. The plant should be turned regularly to prevent it from growing in one direction. Generally, the South African climate offers the correct temperature for indoor cultivation, but in cold high-lying areas where severe frost is experienced in winter, the plants should not be left next to an open window. *Plectranthus* can also be grown

successfully on a stoep.

As a result of the vigorous growth of these plants in pots, it is necessary to prune them once or twice during the summer months to retain a neat and compact form. Pruning will also improve flowering and lengthen the plant's life. During the dormant period or winter the plant should be pruned again. Immediately before the growing season in early spring, the soil can be replaced and the roots pruned at the same time.

## PROPAGATION

Propagation of plants means reproduction by means of seed or cuttings. Cuttings are far quicker and more successful and this method is therefore recommended.

### Seed

The best time to sow the seed is in spring or early summer. A suitable container is the standard plastic pot, 230x60 mm, with adequate drainage holes. To promote drainage, coarse gravel or pieces of bark should be placed in the bottom of the container.

A soil mixture consisting of two parts leaf-mould or peat moss, one part loam and one part sand well mixed, will provide a well-drained porous medium. It is advisable to sterilize the soil mixture, to destroy all undesirable weed seeds and fungal spores. Fill a flat container (e.g. a grill pan) with the soil, cover with foil and place in an oven at 80 °C for a period of 30 minutes. If it is not possible to sterilize the soil, a fungicide should be applied after the seeds have germinated.

The seed trays, filled and lightly firmed down, should be watered before the seed is sown. (This is to ensure that the

seed will stick to the growing medium when sown.) *Plectranthus* seed is very fine and should be broadcast evenly on the surface of the soil. After sowing, lightly cover with a thin layer of dry sand.

The best situation is a shady spot, preferably under a roof or in a glasshouse to prevent rain from washing away the seed. The degree of shade should not be too high but care must be taken that the seed trays are not in direct sunlight. The seed trays should be watered regularly to prevent the growing medium from drying out.

Germination occurs in 2 to 4 weeks. The seedlings grow rapidly and require water regularly. At this stage the seedlings are susceptible to fungi and as a precaution a fungicide can be added to the water. Fortnightly applications of liquid fertilizer promote optimum growth.

Two to 4 months after sowing, the seedlings can be transplanted into suitable containers. It is advisable to add fertilizer (2:3:2), at the rate of 360 g per wheelbarrow of soil, to the potting mixture. The seedlings can remain in the containers until the plants are well established and have attained a height of about 80 mm, after which they can be transplanted into the garden approximately two months after pricking out.

### Gathering of seeds

The seeds are produced in an enlarged calyx which remains on the plant after flowering. Four seeds per calyx are usually formed and they are generally dark brown or black. As soon as the seeds are mature, they separate from the enlarged calyx and fall out. The seeds situated on the lower part of the

inflorescence usually ripen while the upper portion is still flowering. It is best to wait until the plant has almost finished flowering before harvesting the seed by cutting off the inflorescence. The inflorescence is placed in a cardboard-box with newspaper in the bottom and left in a sunny spot to dry. It can be shaken from time to time to help free the seeds.

### Cuttings

*Plectranthus* are easily cultivated from cuttings. The cuttings rapidly develop roots and can flower the same season. The most suitable time for cuttings is spring or summer when rooting is optimal.

The most satisfactory and rapid results are obtained from softwood or tip cuttings. However, semi-hardwood cuttings from the previous year's growth can also be used, but rooting takes much longer. Cuttings should be taken from healthy plants, preferably from the current spring growth. A clean, sharp knife or a pair of secateurs can be used for cutting material from the parent plant.

When preparing the cutting, 2 - 4 nodes are adequate, depending on the species. A suitable length is 80 to 120 mm. The bottom of the cutting is cut just beneath the node and the lower leaves are removed to prevent unnecessary loss of moisture, leaving approximately two pairs of leaves. If tip cuttings are not taken, the top of the cutting is cut just above the node. The prepared cuttings are immediately placed in water to prevent moisture loss.

Washed coarse river-sand (or perlite) is an adequate, easily available and successful rooting medium.

Any container can be used as long as it has adequate drainage. An example of a suitable container is the standard plastic pot 115 x 300 mm which can be easily cleaned. Coarse gravel and pebbles are placed over the drainage holes in the bottom of the container to prevent sand being washed out and to improve drainage. The container is then filled with sand to approximately 20 mm from the top of the container, firmed down, leveled and watered thoroughly.

The cuttings should be placed in rows, approximately 20 mm apart. The depth of the cutting in the sand depends on the size of the cutting. A suitable depth is half the length of the cutting. A dibble as thick as a pencil is used to make small holes in the sand. After the cutting has been placed in the hole, the sand should be pressed down firmly and watered thoroughly. As *Plectranthus* roots

easily, it is not necessary to use a hormone.

If available, a glasshouse with a mist-spraying system is ideal but the cuttings can be propagated quite successfully without the system.

If mist is not available, the cuttings should be placed in a shady spot, preferably under a roof, and should be watered at least twice a day. Rooting takes place after 2 - 3 weeks, when the plants are ready for transplanting. The same procedure used for the transplanting of seedlings can be followed for cuttings.

After transplanting, the cuttings are hardened off (i.e. they are then placed in a protected spot to give the plants an opportunity to establish themselves). These plants are usually left in a sheltered, shady spot for 2 - 3 weeks, and can then be planted out.

## Plectranthus

### **Plectranthus ambiguus**

Spreading groundcover, violet-purple flowers in autumn,  
light to medium shade, sow spring or early summer.

Lamiaceae

200 - 300 mm

### **Plectranthus ambiguus 'Manguzuku'**

Soft herbaceous groundcover, hairy leaves, shady  
sub-tropical and coastal gardens, frost-sensitive, suitable  
for containers and hanging baskets, sprays of purple  
tubular flowers in autumn.

Lamiaceae

### **Plectranthus ambiguus 'Ngoye'**

Upright growth, pink to mauve flowers in autumn,  
attractive crenulate leaves, shade-loving.

Lamiaceae

### **Plectranthus ambiguus 'Thesiger'**

Spreading fast growing ground cover, rooting at nodes,  
bearing hairless leaves and narrow, tubular, mauve  
coloured flowers in short racemes. Suitable as a ground  
cover for shady areas in subtropical regions or where  
frost is not too severe.

Lamiaceae

600mm

<b>Plectranthus ambiguus 'Umgoye'</b>	Lamiaceae
Low growing, spreading groundcover, hairy leaves, sprays of violet-purple flowers during autumn, light shade, sow spring or early summer.	200 - 300 mm
<b>Plectranthus ciliatus</b>	Lamiaceae
Shade-loving, groundcover, sprays of lilac speckled during autumn, sow spring or early summer.	200 - 300 mm
<b>Plectranthus ciliatus 'Bingham'</b>	Lamiaceae
A low growing mounding growth habit. Leaves medium green with a pleasing texture. Flowers pale purple and produced in autumn. Shade to semi-shade, frost sensitive.	
<b>Plectranthus ciliatus 'Drege'</b>	Lamiaceae
Groundcover, attractive foliage, purple on underside, sprays of mauve flowers in early autumn, shade, sow spring or early summer.	200 - 300 mm
<b>Plectranthus ciliatus 'Richard'</b>	Lamiaceae
Soft herbaceous groundcover, hairy leaves, suitable for shady sub-tropical and coastal gardens, frost-tender, sprays of light pink flowers in autumn.	
<b>Plectranthus ecklonii</b>	Lamiaceae
Spreading shrubby perennial, blue, pink or white flowers in spikes during autumn, shade-loving, sow in spring or early summer.	1.5 m
<b>Plectranthus ecklonii 'Erma'</b>	Lamiaceae
Soft, fast-growing, herbaceous shrub with big opposite leaves, purplish at the bottom, suitable for shady subtropical and coastal gardens, frost sensitive, attractive pink flowers in autumn.	2m
<b>Plectranthus ecklonii 'Medleywood'</b>	Lamiaceae
Large leaves, shade or semi-shade, dark blue to purple flowers in autumn, upright growth.	900 mm
<b>Plectranthus ecklonii 'Msikaba'</b>	Lamiaceae
An attractive upright fast growing shrub with opposite leaves and attractive sprays of flowers. Prune after flowering. Suitable for shady gardens.	2m

<b>Plectranthus ecklonii 'Tall blue'</b>	Lamiaceae
Spreading growth habit, spikes of blue flowers in autumn, sow spring or early summer, shade.	2 m
<b>Plectranthus ecklonii 'Tommy'</b>	Lamiaceae
Upright herbaceous shrub, light green leaves, sprays of white flowers in autumn, sow spring or early summer, light to medium shade.	1.5 m
<b>Plectranthus elegantulus</b>	Lamiaceae
Evergreen groundcover, white flowers in autumn, sow in spring, ideal for hanging baskets.	
<b>Plectranthus ernestii</b>	Lamiaceae
Bonzai mint	
Small caudiform succulent with aromatic leaves, round or cone-shaped stems, pale blue to purple flowers on tips.	150 mm
<b>Plectranthus fruticosus</b>	Lamiaceae
Muishondblaar	
Upright growing, decorative leaves with purple reverse, sprays of pink flowers in autumn, light to medium shade, sow spring or early summer.	1 m
<b>Plectranthus fruticosus 'Behr se trots'</b>	Lamiaceae
Fast growing, foliage with purple undersides, sprays of purple flowers in autumn, sow spring or early summer.	1.5 m
<b>Plectranthus fruticosus 'Ellaphie'</b>	Lamiaceae
Very decorative leaves with purple reverse, pale pink flowers in autumn, light to medium shade, good groundcover.	
<b>Plectranthus fruticosus 'James'</b>	Lamiaceae
Muishondblaar	
Upright growth, pink to mauve flowers in autumn, attractive crenulate leaves, semi shade to sun.	700 mm
<b>Plectranthus fruticosus 'Ngoye'</b>	Lamiaceae
Upright growth, pink to mauve flowers in autumn, attractive crenulate leaves, shade-loving.	
<b>Plectranthus fruticosus x zuluensis 'Kranskop'</b>	Lamiaceae
Soft fast-growing shrub to 2 m, leaves opposite with attractive underside, purple sprays of flowers in autumn, suitable for warm sub-tropical and coastal gardens, frost-tender.	

<b>Plectranthus hadiensis var. tomentosus</b>	Lamiaceae
Attractive, large woolly leaves, mauve flowers in autumn, light shade, sow spring or early summer.	500mm
<b>Plectranthus hadiensis var. tomentosus ‘Carnegie’</b>	Lamiaceae
Semi-succulent herbaceous perennial, hairy leaves, sprays of white flowers in autumn, frost tender, suitable for sub-tropical and coastal gardens, sow spring or early summer.	500-600mm
<b>Plectranthus hadiensis var. tomentosus ‘Mamba’</b>	Lamiaceae
A herbaceous branched groundcover with aromatic, hairy, succulent leaves and sprays of white flowers in autumn, suitable as a groundcover or for mixed bedding.	600mm
<b>Plectranthus hadiensis var. woodii</b>	Lamiaceae
A herbaceous groundcover with a perennial rootstock and fleshy roots. Leaves are fleshy, hairy and aromatic, sprays of white flowers are borne in autumn, suitable for rockeries and mixed plantings.	600mm
<b>Plectranthus hereroensis</b>	Lamiaceae
Sprays of dark blue flowers during late summer, sow spring or early summer.	1 - 1.5 m
<b>Plectranthus hereroensis ‘Witpoortjie’</b>	Lamiaceae
Sprays of dark blue flowers during late summer, sow spring or early summer.	1 - 1.5 m
<b>Plectranthus hilliardiae</b>	Lamiaceae
A herbaceous, branched groundcover with lightly aromatic fleshy leaves, sprays of purple flowers in summer, suitable for sub-tropical gardens or as a house plant, requires to be kept well watered in summer.	400mm
<b>Plectranthus lucidus</b>	Lamiaceae
Low growing groundcover for shady areas. White flowers in summer-autumn.	150 mm
<b>Plectranthus madagascariensis</b>	Lamiaceae
Semi-succulent spreading groundcover, hairy leaves, sprays of white flowers, suitable for sub-tropical and coastal gardens, frost-tender, suitable for containers and hanging baskets.	
<b>Plectranthus madagascariensis (variegated)</b>	Lamiaceae
A spreading, mounding groundcover with variegated	

aromatic foliage. Very vigorous and can tolerate sun and shade. Suitable for low maintenance areas.	
<b>Plectranthus madagascariensis var. aliciae</b>	Lamiaceae
Aromatic decumbent to arching groundcover, light shade or half sun, lilac to white flowers in autumn.	
	400 mm
<b>Plectranthus madagascariensis var. madagascariensis</b>	Lamiaceae
Semi-succulent spreading groundcover with opposite hairy leaves, suitable for sub-tropical and coastal gardens, frost tender, sprays of white flowers, suitable for containers and hanging baskets.	
<b>Plectranthus madagascariensis var. ramosior</b>	Lamiaceae
Branches decumbent to erect, succulent rootstock, flowers white to mauve, in terminal racemes, autumn.	
<b>Plectranthus neochilus</b>	Lamiaceae
A fast growing, hardy, drought resistant groundcover with aromatic leaves and mauve flowers from spring to autumn. Full sun to light shade.	
<b>Plectranthus neochilus 'Siteki'</b>	Lamiaceae
Fast growing groundcover, full sun, aromatic leaves, mauve flowers from spring to autumn.	
<b>Plectranthus oertendahlii</b>	Lamiaceae
Compact mat-forming, silvery variegated leaves, sprays of white flowers, shade, good pot plant, sow spring or early summer.	
	50 200 mm
<b>Plectranthus petiolaris 'Geoff'</b>	Lamiaceae
Groundcover with succulent leaves, blue flowers, shade loving.	
<b>Plectranthus praetermissus</b>	Lamiaceae
Tufted groundcover with interesting leaves and masses of purple flowers, autumn, shade-loving, sow spring, suitable for hanging baskets.	
<b>Plectranthus purpuratus</b>	Lamiaceae
Small, dense, compact, mat-forming, white flowers.	
<b>Plectranthus purpuratus 'Umgeni'</b>	Lamiaceae
Small, dense, compact, mat-forming groundcover, white flowers.	
<b>Plectranthus rehmannii</b>	Lamiaceae
Upright growth, aromatic foliage, semi-succulent,	

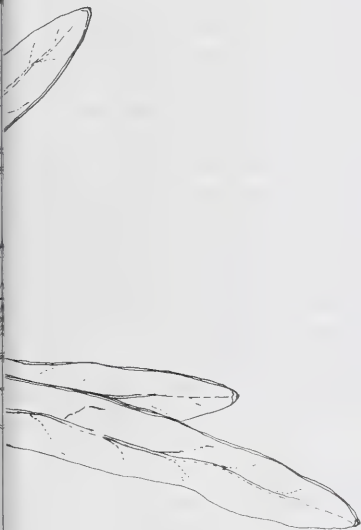
sprays of white flowers, sow spring or early summer. <i>Plectranthus saccatus</i> var. <i>longitubus</i> Blue flowers in autumn, good groundcover, prefers light shade.	1.2 m Lamiaceae 400 mm
<b><i>Plectranthus saccatus</i> var. <i>longitubus</i> ‘King Goodwill’</b> An upright to spreading shrub with opposite aromatic leaves and sprays of white flowers in autumn, suitable for very shady patches.	Lamiaceae 700mm
<b><i>Plectranthus saccatus</i> var. <i>longitubus</i> ‘Ngoye’</b> An upright to spreading shrub with shiny opposite, aromatic leaves and sprays of purple flowers in autumn, suitable for very shady patches.	Lamiaceae 700mm
<b><i>Plectranthus saccatus</i> var. <i>longitubus</i> ‘Umtamvuma’</b> Fast-growing, light green leaves, purple flowers in autumn, shade-loving.	Lamiaceae
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i></b> Blue or white flowers, creeping groundcover.	Lamiaceae
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i> ‘Izingolweni’</b> A flat growing ground cover with aromatic opposite leaves and sprays of purple flowers with dark purple speckles. Suitable for very shady patches.	Lamiaceae 200mm
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i> ‘Kirsten’</b> Soft fast growing spreading herbaceous shrub to aromatic leaves, sprays of large purple flowers in autumn, suitable for shady sub-tropical and coastal gardens, frost-tender, good container plant.	Lamiaceae 2 m
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i> ‘Mkambati’</b> Groundcover with succulent leaves, blue flowers, shade-loving.	Lamiaceae
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i> ‘Mtunzini’</b> White flowers in autumn, good groundcover, prefers light shade.	Lamiaceae 400mm
<b><i>Plectranthus saccatus</i> var. <i>saccatus</i> ‘Nkandla’</b> An upright shrub with aromatic opposite leaves and sprays of purple flowers. Top lip of the flower not bent back, with dark purple stripes. Suitable for very shady patches.	Lamiaceae 800mm

<b>Plectranthus spicatus</b>	Lamiaceae
Attractive, decumbent, groundcover, succulent leaves, full sun, purple flowers in autumn, sow spring.	500 mm
<b>Plectranthus spicatus 'Nelspruit'</b>	Lamiaceae
Decumbent, semi-succulent, spikes of mauve flowers in autumn, leaves boat-shaped, grow in full sun or semi-shade, sow spring or summer, tolerant of light frost.	500 mm
<b>Plectranthus strigosus 'Albert'</b>	Lamiaceae
Soft herbaceous groundcover with opposite leaves, suitable for warm sub-tropical and coastal gardens, frost-tender, sprays of white flowers in autumn, good plant for containers and hanging baskets.	
<b>Plectranthus strigosus 'Bulolwe'</b>	Lamiaceae
Soft herbaceous groundcover with opposite purplish leaves, frost-tender, suitable for warm sub-tropical and coastal gardens, sprays of purple flowers in autumn, does well in containers and hanging baskets.	
<b>Plectranthus swynnertonii</b>	Lamiaceae
Shrubby groundcover, crescented leaves, white flowers, shade.	
<b>Plectranthus verticillatus</b>	Lamiaceae
Attractive, prostrate groundcover, shade-loving, white flowers in autumn, recommended, sow spring.	500 mm
<b>Plectranthus verticillatus 'Barberton'</b>	Lamiaceae
A vigorous, spreading groundcover. It has medium sized dark green leaves with a deep rich wine-red colour beneath the leaves. Small white flowers are produced in autumn and sometimes at other times of the year. Shade and half-day sun.	300 mm
<b>Plectranthus verticillatus 'Geelhoutboskloof'</b>	Lamiaceae
A fast growing groundcover with fleshy leaves and attractive sprays of pink flowers. A good groundcover in shady gardens and hanging baskets.	
<b>Plectranthus verticillatus 'Marlene'</b>	Lamiaceae
Soft herbaceous groundcover, for shady sub-tropical gardens, frost-tender, sprays of white flowers in autumn.	

<b>Plectranthus verticillatus 'Ubombo'</b>	Lamiaceae
A flat growing carpet-forming succulent herb with fleshy leaves that are purple underneath and sprays of white flowers in autumn. Suitable as a groundcover in shady areas and excellent in a hanging basket.	
<b>Plectranthus verticillatus 'Umbuluzi'</b>	Lamiaceae
A flat growing carpet forming succulent herb with fleshy leaves that are green underneath and sprays of white flowers in autumn. Suitable as a groundcover in shady areas and excellent in a hanging basket.	
<b>Plectranthus verticillatus x P. fruticosus 'Malelane'</b>	Lamiaceae
Soft herbaceous groundcover, shady subtropical gardens, frost-tender, sprays of white flowers in autumn.	
<b>Plectranthus verticillatus x P. fruticosus 'Mariane'</b>	Lamiaceae
Soft herbaceous groundcover, hairy leaves, suitable for warm sub-tropical and coastal gardens, frost-tender, sprays of light purple flowers in autumn.	
<b>Plectranthus zuluensis 'Devils Knuckles'</b>	Lamiaceae
An upright shrub with opposite, aromatic leaves and sprays of purple flowers in summer and autumn.	
Suitable for shady-rich patches.	800mm
<b>Plectranthus zuluensis 'Oribi'</b>	Lamiaceae
Soft fast-growing herbaceous shrub with opposite aromatic leaves, attractive blue flowers in summer and autumn, suitable for shady subtropical and coastal gardens where frost is not too heavy.	
	1.5-2m
<b>Plectranthus zuluensis 'Sky'</b>	Lamiaceae
An upright shrub with opposite, aromatic leaves and sprays of blue flowers in summer and autumn, suitable for shady-rich patches.	
	800mm
<b>Plectranthus zuluensis 'Umgai'</b>	Lamiaceae
Groundcover, blue flowers in autumn.	



Catherine Handforth



## GROWING PROTEAS

Proteaceae are found in southern Africa, Asia, Australasia and Central and South America, especially in areas with long dry seasons. In South Africa we have 14 genera with about 394 species, distributed from the south-western Cape along the southern and eastern parts of the country to the Limpopo River in the north. The genera occurring in southern Africa are *Aulax*, *Leucadendron*, *Paranomus*, *Serruria*, *Faurea*, *Sorocephalus*, *Spatalla*, *Protea*, *Diastella*, *Mimetes*, *Orothamnus*, *Leucospermum*, *Brabejum* and *Vexatorella*.

The vast majority of South African Proteaceae occur in the Cape, hugging the coast and mountainous regions eastwards to Port Elizabeth and spreading up the west coast to Vanrhynsdorp. The soils are variable, generally poor with a predominance of Table Mountain Sandstone, particularly in the mountainous regions. Proteaceae are also found growing in Bokkeveld shales, which have a high content of clay. The other extreme of virtually pure sand also exists, particularly along our coastal regions. The pH of the soils is, by and large, on the acid side although there are instances of areas recording alkaline soils of as high as pH 8.0.

The climatic conditions that the Cape flora experiences are variable. A maximum of 32 °C is not uncommon during the summer months, particularly in the regions of the Sandveld and Cederberg. The mountain ranges are cooler, experiencing the effects of prevailing winds, mists and cloud. The minimum temperatures, on the other hand, fall below 0 °C in many of these areas although not for long periods. Snow falls regularly in the Cape mountains each winter.

Proteaceae occur in regions where the rainfall varies from as low as 180 mm to 2 500 mm per annum. This, however, is rather deceptive. In their natural habitat many species occur in depressions, gullies, valleys and on south-facing slopes where the plants utilize underground moisture through seepage accumulated during the wet winter months. A good example of this is *Protea cynaroides* which is always found growing in areas with abundant underground seepage. The annual rainfall on the other hand can vary from 300 mm to 1 500 mm and appears to have little direct influence on its existence.

Probably one of the prime factors in the ecology of Proteaceae is a well drained soil and an efficient drainage system. This ensures well-aerated soil and a cool root system, which is important.

The Proteaceae are essentially social plants, although there are a number of exceptions. Many of the species growing in their natural habitat occur in close proximity to one another, forming close-knit communities. The individual plants protect one another from prevailing winds. A dense cover is established

which prevents compaction, keeps the soil cool and reduces the rate of evaporation.

## PROPAGATION

### Seed

#### *Harvesting of seed*

There are two distinct categories with regard to harvesting seed of Proteaceae - those species that retain their seed on the plant and those that discard their seed when ripe. In species that retain their seed, the heads should only be harvested a full year after flowering. Species that discard their seed when ripe should be harvested as the first heads on the bush start to release seed. The flowerheads harvested for seed purposes are sun-dried in trays to release the seed, and cleaned. The seed is then treated with hot water (50 °C for 30 min), dried, treated with a fungicide such as Thiran and stored in cool conditions until sowing.

#### *Sowing*

The optimum time for sowing is in autumn (April - May). Sowing in seed trays or open ground is suitable. Seed trays must be well prepared with plenty of drainage holes at the base. It is important that the soil mixture be well drained. A suggested growing medium is two parts coarse sand; one part leaf mould or composted milled bark; and one part loam. Depending on the ingredients, one may have to vary the mixture in order to obtain a suitable growing medium. The seed must be sown in a sunny situation with good air circulation.

*Leucospermum* seed should be pre-treated by soaking for 24 hours in 1% hydrogen peroxide just before sowing.

Broadcast the seed evenly, firm down and then cover with dry clean sand or composted milled pine bark. The seed is then watered thoroughly. A further layer may be applied to cover any exposed seed. A suitable depth for sowing is one and a half times the size of the seed.

It is advisable to cover all seed trays and seed beds after sowing with netting wire to prevent birds and mice from disturbing the seed.

The germination period varies from 1 to 3 months, depending on the species. The cotyledons are the first to appear, followed by true leaves. At this stage the young seedlings are ready for pricking out into individual containers using a good fynbos potting medium

After pricking out, water thoroughly and place in the full sun. The seedlings must receive regular water but must be allowed to dry out between waterings. Seedlings should be watered in the early morning allowing the plants to dry out before evening to reduce fungal problems. Once the roots show signs of growing through the containers and the plants will be ready to be planted out into the open ground.

### *Planting out*

When choosing a site for Proteaceae, remember the following points:

- Good drainage
- Sunny aspects
- Good air circulation
- Adequate water

Before planting, the site must be cleaned of all growth. Individual holes, just big enough to take the root ball, should be prepared for each plant. No manure should be used, although well-matured compost mixed into the soil before planting can be beneficial.

The recommended planting distance is 0.65 m for all plant material that attains a maximum height of 2 m. All species exceeding 2 m are planted at a distance of 1 m.

During the first two years, the young plants must be watered regularly. By mulching the area with compost or wood chips to a depth of 50 to 80 mm, weed development is kept to a minimum, the soil is kept moist, soil temperatures are kept down and mulching is a slow release form of feeding.

## Proteas

### **Aulax cancellata**

Channelleaf featherbush

Needle-shaped leaves, Male plants have a pale yellow plume-like head, and female plants have a rounded head with a cup of bract-like leaves February to December, rare.

Proteaceae

1.5-2m

### **Aulax pallasia**

Needleleaf Featherbush

Dioecious multistemmed shrub with persistent rootstock, needle-like leaves, yellow flower heads in summer, sow in autumn.

Proteaceae

1-2m

<b>Aulax umbellata</b>	Proteaceae
Broadleaf featherbush	
Dioecious shrub with long slender ascending branches rising above the more compact lower parts, broad leaves, yellow flower heads in late summer, sow in autumn.	2m
<b>Diastella buekii</b>	Proteaceae
Franschhoek silky puff	
An endangered species from the Franshoek valley that forms an attractive dense green mat covered in starlike flowers in spring.	
<b>Leucadendron 'Safari Sunset'</b>	Proteaceae
Very showy hybrid, excellent cut flower.	1 m
<b>Leucadendron 'Candles'</b>	Proteaceae
A cone-bush with deep-red bracts surrounding the flower-head, alternating with yellow and orange shades on the inside. It flowers from April to August. Suitable as a garden/landscape plant.	
<b>Leucadendron 'Duet'</b>	Proteaceae
This hybrid produces bright red to yellow inflorescences that give the shrub a bicoloured appearance. It flowers from June to September. Makes an unusual landscape plant.	1.5m
<b>Leucadendron 'Petite'</b>	Proteaceae
Leucadendron hybrid of uncertain parentage. A very strong grower producing very long pink-red flower stems (500mm) from February to July. It has a spread of about 1m. A very useful garden subject and an excellent 'Cape Greens' filler.	2m
<b>Leucadendron 'Winter Red'</b>	Proteaceae
Low growing cone-bush, flower red outside and yellow on inside with an attractive shape, suitable garden plant and for 'Cape Green'.	1 m
<b>Leucadendron arcuatum</b>	Proteaceae
Erect or spreading multistemmed shrub from persistent rootstock, thick spoon-shaped hairless leaves, male and female inflorescences with cream-yellow bracts in spring, sow autumn.	1-1.3m

## **Leucadendron argenteum**

Silver tree

Proteaceae

7 - 10 m

This beautiful tree with its soft, hairy, bright silver leaves is endemic to Table Mountain. The long leaves overlap each other so tightly that they mask the upper branches completely. They shimmer in the sunshine and ripple in the breeze.

The silver tree is admired and grown by many plant lovers. It is beautifully proportioned, grows about 10 m tall and has definitely become one of South Africa's floral gems. Though it has always grown on the foothills of the Cape Peninsula, urban development, many mountain fires, as well as foreign invader plants have taken their toll. The trees are unfortunately short-lived and rarely last more than twenty years.

September marks the flowering of the silver trees. The female "cones" are remarkably bigger than the male ones and densely covered in silvery hairs. Like all leucadendrons, the silver tree has the male and female flowers on separate plants. The fruits remain in the "cone" for a year or longer before they are released. Each fruit is equipped with a "parachute" which aids dispersal by wind.

Although silver trees, in nature, grow only in soil derived from weathered granite with a high amount of moisture, several other soil types can also provide a home in which these trees, propagated from seed or cuttings, will grow to perfection and become quite a feature or attraction.

## **Leucadendron brunioides**

Footid conebrush, Tolletjies

Proteaceae

0.5-2m

Erect many-stemmed shrub, persistent rootstock, small linear leaves, flowers in spring; small grey cones, sow in autumn.

## **Leucadendron burchellii**

Riviersonderend sunbush

Proteaceae

1.6m

An erect shrub with a single basal stem and dark-green leaves with a purplish margin. Yellow flowerheads with a lemon scent. Requires a well drained position. A rare species from the Riviersonderend Mountains.

<b>Leucadendron chamelaeae</b>	Proteaceae
Witsenberg cone-bush	
Endangered. Sparsely branched shrub, narrow leaves, bright yellow flowerheads in spring, good cut flower, sow autumn.	1.5-2m
<b>Leucadendron comosum var. homaeophyllum</b>	Proteaceae
Needle-leaf cone-bush. Naaldetolbos. Miersdorp ridge cone-bush	
An erect shrub with attractive dark-red flowers in 1 summer. A rare species that was until recently thought to be extinct.	7m
<b>Leucadendron conicum</b>	Proteaceae
Gardenroute cone-bush, Vaaltolbos	
Tall tree-like shrub, very dark green leaves, involucral bracts pink-red or yellow, flowers in late spring, sow autumn.	4-6m
<b>Leucadendron coniferum</b>	Proteaceae
Dune cone-bush, Duingeelbos	
Rounded shrub or small tree, densely branched, narrow yellow-green leaves, yellow flowers in spring, cones reddish in autumn, sow autumn, easily cultivated, good garden subject.	2-4m
<b>Leucadendron cryptocephalum</b>	Proteaceae
Concealed cone-bush	
Rounded shrub. Good filler with proteas in the garden or with flower arrangements, concealed heads late summer. Sow in autumn.	1 m
<b>Leucadendron daphnoides</b>	Proteaceae
Dutoitskloof cone-bush	
Stout shrub, upper leaves undergo a series of colour changes - green to pale yellow or ivory white to reddish in winter - spring; very attractive.	1.3m
<b>Leucadendron discolor</b>	Proteaceae
Piketberg cone-bush, Rooitolbos	
Erect bushy shrub, male flowers red surrounded by bright yellow bracts in spring, sow in autumn, responds well to cultivation, good cut flower.	2-3m

<b>Leucadendron eucalyptifolium</b>	Proteaceae
Gumleaf conebrush, Grootgeelbos	
'Eucalyptus-like' leaves, bright yellow flowerheads in winter-spring, good cut flower, sow autumn, fast growing, flowers in two years from seed.	3 - 5 m
<b>Leucadendron flexuosum</b>	Proteaceae
Worcester conebrush	
Tall erect shrub, long slender branches, linear leaves, floral bracts yellow or reddish yellow during autumn, sow in autumn.	2.5m
<b>Leucadendron floridum</b>	Proteaceae
Flats conebrush, Tolbos	
Much branched shrub, silvery silky haired foliage, flowers in profusely branched heads surrounded by shiny bright yellow bracts, in spring, very showy, good cutflower, sow autumn.	2m
<b>Leucadendron foedum</b>	Proteaceae
Hopefield conebrush	
Tall, spreading shrub, yellow to red heads in spring, suitable for sandy coastal conditions.	2m
<b>Leucadendron galpinii</b>	Proteaceae
Hairless conebrush	
Dense greyish shrub, linear twisted leaves, female flowerheads showy shiny silver, mature cones silky in early summer, no involucre bracts, sow autumn.	2-3m
<b>Leucadendron gandogerii</b>	Proteaceae
Broadleaf conebrush	
Robust rounded shrub, smooth shiny leaves, young foliage red in late summer-autumn, large top leaves turn bright yellow flushed with orange and red in spring, retains colour for up to 3 months, very showy, good cutflower, sow in autumn.	1-1.6m
<b>Leucadendron lanigerum var. laevigatum</b>	Proteaceae
Shale conebrush	
Erect shrub with persistent rootstock, branches arising from a single stem at ground level, long involucre leaves pale yellow in winter-spring, occurs in clay soils, sow in autumn.	1.5m

<b>Leucadendron laurifolium</b>	Proteaceae
Golden cone-bush, Loerietolbos	
Erect rounded shrub, bright yellow flowerheads during winter, good cut flower, sow autumn; flowers in second year from seed.	2m
<b>Leucadendron laxum</b>	Proteaceae
Bredasdorp cone-bush	
Slender lax erect shrubs branching from single stem at ground level, needle-like foliage, numerous yellow and greenish flower heads in clusters in spring, female heads form attractive colourful egg-shaped cones, prefers damp situation, sow in autumn.	1.5m
<b>Leucadendron levisanum</b>	Proteaceae
Cape flats cone-bush	
Small leaved shrub, male plants with yellow flowers, female plants with cones, suitable for sandy flats.	1-2m
<b>Leucadendron linifolium</b>	Proteaceae
Line-leaf cone-bush, Duineknoppiesbos	
Well branched erect slender shrub, narrow twisted leaves, small yellow flowerheads in spring, female cones globose greyish and decorative, sow autumn, tolerates brack soil, useful filler for florists.	1.5-2m
<b>Leucadendron loerense</b>	Proteaceae
Densely-branched shrub, velvety hairy reddish-green leaves, involucral leaves greenish-white, flowers in mid summer, sow in autumn.	600mm
<b>Leucadendron loranthifolium</b>	Proteaceae
Green-flowered cone-bush	
Erect shrub, broad elliptic grey-green leaves, greenish flower heads in winter-spring, sow in autumn.	2m
<b>Leucadendron macowanii</b>	Proteaceae
Acacia-leaf cone-bush.	
Involucral leaves inconspicuous, female cones russet-red, good cut flower subject.	3-4m
<b>Leucadendron meridianum</b>	Proteaceae
Limestone cone-bush	
Densely branched, upper leaves are crowded and bright yellow, flowering from July to August, limestone areas, coastal garden.	2m

<b>Leucadendron microcephalum</b>	Proteaceae
Oilbract conebrush	
Supple-stemmed, flowers yellow with brown bracts in both sexes.	1.5m
<b>Leucadendron modestum</b>	Proteaceae
Roughleaf conebrush	
Small erect shrub, branches from a single stem, narrow leaves, small yellow flowerheads surrounded by red tinged pale green bracts in early spring, useful for flower arrangements.	600mm
<b>Leucadendron muirii</b>	Proteaceae
Silverball conebrush	
Erect many branched spreading shrub, spoon shaped thick rounded leaves, cream-yellow flower heads in early summer, female cones ashy-grey, lime tolerant, sow in autumn.	1-2m
<b>Leucadendron nervosum</b>	Proteaceae
Silky-puff conebrush, Syblaartolbos	
Rare. An attractive silver shrub with flowers in spring.	1.5m
<b>Leucadendron nobile</b>	Proteaceae
Karoo conebrush, Naaldblaartolbos	
Tall shrub, long needle-like leaves, pale green to ivory spike-like male flowerheads and conspicuous green egg-shaped female cones in mid summer, sow autumn.	4m
<b>Leucadendron platyspermum</b>	Proteaceae
Plateseed conebrush, Geelbos	
Erect shrub, yellow-green foliage, flowers in spring, female bracts more yellow than those of male during flowering period, sow in autumn. Very large cone.	1-2m
<b>Leucadendron pondoense</b>	Proteaceae
Pondoland conebrush	
Tall shrub, single main stem, narrow leathery leaves, leaf tips red, involucre leaves absent, sow autumn.	6m
<b>Leucadendron procerum</b>	Proteaceae
Ivory conebrush	
Tall well-branched shrub, oblong leaves, floral bracts conspicuous pale green or ivory-white, flower-heads are reddish, spring flowering, sow in autumn.	3m

<b>Leucadendron roodii</b>	Proteaceae
Upright shrub, involucre leaves faintly tinged with red, spring flowering, sow autumn.	1.5 m
<b>Leucadendron rubrum</b>	Proteaceae
Spinningtop cone-bush, Tolletjesbos	
Tall shrub, silvery green foliage, flowers in early spring, female cones ideal for dried arrangements, sow autumn, flowers 3 years from seed.	2.5m
<b>Leucadendron salicifolium</b>	Proteaceae
Common streamcone-bush, Riviertoelbos	
Tall erect shrub, narrow leaves, flowerheads on numerous short branchlets, surrounded by yellow bracts in winter-spring, grows in damp sandy areas, sow in autumn.	2-3m
<b>Leucadendron salignum</b>	Proteaceae
Common sunshine cone-bush, Geelbos	
Height variable, many stemmed shrub, foliage may be red, male involucre yellow or red, female yellow, variable flowering time, autumn to mid-summer, good cut flower, sow autumn; flowers 2 years from seed.	0.5-2m
<b>Leucadendron sessile</b>	Proteaceae
Western sun cone-bush, Tolbos	
Stout shrub, flowerheads surrounded by bright yellow bracts reddening with age, in late winter, sow in autumn, requires plenty of water, good cut flower.	1-2m
<b>Leucadendron spissifolium</b>	Proteaceae
Spear-leaf cone-bush	
Flowerheads with bright yellow bracts, good cut flower subject.	1-2m
<b>Leucadendron spissifolium subsp. fragrans</b>	Proteaceae
Fragrant spear-leaf cone-bush	
Erect multi-stemmed shrub, persistent rootstock, twisted hairless leaves, involucre bracts yellow to ivory in spring, sow autumn.	1m
<b>Leucadendron spissifolium subsp. natalense</b>	Proteaceae
Natal spear-leaf cone-bush	
Erect multi-stemmed shrub, persistent rootstock, slender bright green leaves, involucre bracts yellow in early summer, sow in autumn.	1m

<b>Leucadendron spissifolium subsp. phillipsii</b> Kareedouwvlakte spear-leaf cone-bush	Proteaceae
Multi-stemmed shrub, persistent rootstock, fine bright green foliage, yellow involucral bracts in early summer, sow autumn.	0.6m
<b>Leucadendron spissifolium subsp. spissifolium</b> Common spearleaf cone-bush	Proteaceae
Multi-stemmed shrub, persistent rootstock, yellow involucral bracts in spring, sow in autumn.	0.5-1.3m
<b>Leucadendron stellare</b> Star cone-bush	<b>Proteaceae</b>
Erect slender small leafed shrub, multistemmed, persistent rootstock, involucral leaves greenish-yellow in spring, sow in autumn.	2m
<b>Leucadendron stelligerum</b> Agulhas cone-bush	Proteaceae
Slender graceful shrub, pointed ivory-yellow involucral leaves in late winter, giving a star-like appearance, seeds retained in silvery cones, sow in autumn, occurs in clay soils.	1-1.5m
<b>Leucadendron strobilinum</b> Peninsula cone-bush, Rotstolbos	Proteaceae
Stocky, slow-growing, leaves bright green, large cones, flowers ivory-yellow, good cut flower.	2 m
<b>Leucadendron teretifolium</b> Needle-leaf cone-bush, Waterbossie	Proteaceae
Well suited to many conditions, also coastal gardens, dense spreading needle-like shrubs, flowering late in August, greenish cones.	1m
<b>Leucadendron thymifolium</b> Malmesbury cone-bush	Proteaceae
Slender shrub, small elliptic leaves, small but conspicuous flowerheads in winter-spring, sow in autumn, will tolerate clay soils.	2m
<b>Leucadendron tinctum</b> Spicy cone-bush, Toffee-appel	Proteaceae
Low bushy habit, leaves rounded tips, cones have spicy odour, lemon and red bracts are glabrous, July to August.	0.5 m - 1.3 m

<b>Leucadendron uliginosum</b>	Proteaceae
Silverbos	
Silvery foliage, flowers yellow, excellent for flower arrangements.	2 m
<b>Leucadendron uliginosum subsp. uliginosum</b>	Proteaceae
Outeniqua conebrush	
Bushy shrub, silvery hairy foliage, involucral bracts form showy yellowy-silver star-like cups in early summer, good cutflower, sow autumn, flowers two years from seed.	2 - 2.5 m
<b>Leucadendron xanthoconus</b>	Proteaceae
Sickleleaf conebrush	
Dense shrub, soft narrow leaves, cones surrounded by yellow bracts in spring, sow autumn, flowers 3 years from seed.	1-2m
<b>Leucospermum 'Ballerina'</b>	Proteaceae
Strong spreading shrub, showy pink flowers from July to October.	1.5 m
<b>Leucospermum 'Caroline'</b>	Proteaceae
(cordifolium x tottum) Rounded spreading shrub, red or orange flowers in early summer, very attractive, strong grower.	1.5 m
<b>Leucospermum 'Highgold'</b>	Proteaceae
A vigorous, erect cordifolium-type producing long stems with large yellow flowers. Tolerates alkaline soil.	
<b>Leucospermum 'Scarlet Ribbon'</b>	Proteaceae
Very attractive, compact rounded shrub, flowers red to pink, September to October. (L. glabrum x L. tottum)	1 - 2 m
<b>Leucospermum 'Spider'</b>	Proteaceae
An exceptionally vigorous plant which produces long stems and a high yield. Very Phytophthora resistant. Ideal rootstock for grafting.	
<b>Leucospermum 'Starlight'</b>	Proteaceae
A bicoloured L.lineare-like flower (creamy-white and red) which blooms late and can be made to flower up to December by disbudding. The most outstanding characteristic of the flower is its long stems, up to 1m.	

<b>Leucospermum ‘Sunrise’</b>	Proteaceae
The earliest pincushion cultivar available (cordifolium x patersonii). Medium red flowerheads with a peak flowering time in spring. An exceptionally vigorous grower due to strong hybrid vigour; can tolerate alkaline soils.	
<b>Leucospermum ‘Tango’</b>	Proteaceae
Striking peach pincushion, fast growing, rounded shrub, good cut flower, early summer.	
<b>Leucospermum bolusii</b>	Proteaceae
Gordons Bay pincushion, Witluisiesbos	
Erect spreading rounded shrub, numerous small fragrant whitish flowerheads in late spring, decorative garden shrub, good cut flower.	
<b>Leucospermum conocarpodendron</b>	Proteaceae
Vaalkreupelhout, Grey tree pincushion	
Tree, bright yellow flowers, suitable for coastal gardens, flowers October to December.	
<b>Leucospermum conocarpodendron subsp. conocarpodendron</b>	Proteaceae
Grey tree pincushion, Vaalkreupelhout	
Tree-like shrub, bright yellow flowers in spring to summer, sow in autumn, suitable for coastal gardens.	
<b>Leucospermum cordifolium</b>	Proteaceae
Pincushion, Speldekussing, Bobbjaanklou	
Rounded spreading shrub, flowerheads shades of red and yellow, summer flowering, sow autumn, very attractive, strong grower.	
<b>Leucospermum cordifolium ‘Fire dance’</b>	Proteaceae
Pincushion, Speldekussing	
Deep red, Pincushion. Peak flowering time early September to mid-October, it has smallish flower heads.	
<b>Leucospermum cordifolium ‘Flamespike’</b>	Proteaceae
Pincushion	
Selection of <i>Leucospermum cordifolium</i> , bright reddish orange flowers.	

<b>Leucospermum cordifolium 'Vlam'</b>	Proteaceae
Pincushion, Speldekussing	
The largest red pincushion available, flower diameter 120 mm, deep orange-red, style tip yellow, early October to mid-November. It has strong, erect stems, and produces a good late harvest after disbudding.	
<b>Leucospermum cordifolium 'Yellow Bird'</b>	Proteaceae
Pincushion, Speldekussing	
Rounded spreading shrub, pinkish flowers in early summer, very attractive and strong grower.	1.5 m
<b>Leucospermum cordifolium x L. tottum</b>	Proteaceae
Very attractive compact shrub, flowers orange to pink, September to October.	1 - 2 m
<b>Leucospermum cuneiforme</b>	Proteaceae
Wart-stemmed pincushion, Gewoneluisiesbos, Gewonespeldekussing	
Many-stemmed tall shrub, large yellow cone-shaped flower heads in mid-winter to mid-summer, sow in autumn, good cut flower.	1.6-3m
<b>Leucospermum erubescens</b>	Proteaceae
Oudtshoorn pincushion, Speldekussing	
Erect shrub, flowers red to yellow in numerous large heads in spring to summer, sow in autumn, good cut flower.	1-2m
<b>Leucospermum formosum</b>	Proteaceae
Silverleaf-wheel pincushion	
Shrub, hairy grey leaves, large golden-yellow flowerheads with catherine-wheel appearance, in spring, sow in autumn, excellent for flower arranging.	3m
<b>Leucospermum fulgens</b>	Proteaceae
Potberg pincushion	
Upright rounded shrub, flowerheads pink-orange aging to orange-red, in summer, sow autumn.	3 x 4 m
<b>Leucospermum glabrum</b>	Proteaceae
Outeniqua pincushion	
Erect rounded shrub, large bright green many-toothed leaves, spectacular scarlet to orange flowerheads in spring, sow in autumn, good cut flower.	1.5 m

<b>Leucospermum glabrum 'Helderfontein'</b>	Proteaceae
Striking red-orange pincushion, fast growing, upright shrub, good cut flowers, early summer.	2m
<b>Leucospermum grandiflorum</b>	Proteaceae
Grey-leaf fountain pincushion, Luisiesboom	
Tall, erect, branches with dense greyish leaves, large yellow flowers from July to December, suitable for granite soils.	2.5m
<b>Leucospermum gueinzii</b>	Proteaceae
Kloof fountain pincushion	
Stout upright shrub, bright green foliage, flowerheads orange to red, summer, sow autumn.	2 - 3 m
<b>Leucospermum heterophyllum</b>	Proteaceae
Trident pincushion	
Mat-forming shrublet, groundcover and rockeries, small pale yellow flowers from August to January, coastal gardens.	
<b>Leucospermum hypophyllocarpodendron</b>	Proteaceae
Snakestem pincushion, Slangbossie	
Prostrate mat-forming shrub, yellow flowerheads in spring to mid-summer, sow in autumn.	1m
<b>Leucospermum lineare</b>	Proteaceae
Needle-leaf pincushion	
A large attractive sprawling shrub, with yellow flowers in the spring and early summer.	2 m
<b>Leucospermum muirii</b>	Proteaceae
Albertinia pincushion, Bloukoolhout	
Erect bushy rounded shrub, numerous small yellow flowerheads in winter to spring, sow in autumn, good cut flower.	1.5m
<b>Leucospermum mundii</b>	Proteaceae
Langeberg pincushion	
Grey foliage, tidy shrub for small garden, small yellow flowerheads turning orange, recommended.	1m
<b>Leucospermum oleifolium</b>	Proteaceae
Overberg pincushion	
Compact shrub, flowerheads open yellow, becoming crimson with age, good cut flower.	1m

<b>Leucospermum oleifolium x Diastella thymelaeoides</b>	Proteaceae
Sparse erect shrub, suited for fynbos and coastal gardens, beautiful small pink pincushion-like flowers from August to November.	1 m
<b>Leucospermum patersonii x L. cordifolium</b>	Proteaceae
Attractive, dense growing, floriferous, shrub 2 m spread, flowers very similar to <i>Leucospermum cordifolium</i> , flowering lasts for 6 to 8 weeks during spring.	2 m
<b>Leucospermum praecox</b>	Proteaceae
Mosselbay pincushion	
Large shrub, large flowerheads, yellow aging to orange, in autumn to spring, sow in autumn, good cut flower.	3m
<b>Leucospermum reflexum</b>	Proteaceae
Rocket pincushion, Perdekop	
Tall rounded shrub, silver-grey foliage, orange-scarlet flowerheads in spring to mid summer, sow in autumn, hardy, good garden subject.	3m
<b>Leucospermum reflexum var. luteum</b>	Proteaceae
Yellow rocket pincushion, Geel perdekop	
Large rounded grey-leafed shrub, clear yellow flowerheads in spring to mid summer, sow in autumn, good garden subject.	3m
<b>Leucospermum saxatile</b>	Proteaceae
Karoo pincushion	
Prostrate sprawling shrub, small but distinctive pale lime-green to pink flower heads in mid winter to mid summer, sow in autumn.	
<b>Leucospermum tottum</b>	Proteaceae
Ribbon pincushion, Oranjerooi-speeldekussing	
Much branched shrub, linear oblong leaves, pink flowerheads, September to January, good cut flowers.	1 m
<b>Leucospermum tottum x gueinzii</b>	Proteaceae
Strong spreading shrub, showy pink flowers from July to October.	1.5m
<b>Leucospermum truncatulum</b>	Proteaceae
Patrysbos, Oval-leaf pincushion	
Oval-leafed grey shrub, flowers yellow to pink, summer, lower coastal slopes, sow autumn.	2 m

<b>Leucospermum truncatum</b> x <b>L. conocarpodendron</b>	Proteaceae
Attractive, compact rounded shrub, flowers yellow, September to October.	1 m
<b>Leucospermum vestitum</b>	Proteaceae
Silky-haired pincushion	
Stifly upright to spreading shrub, straight silky hairs on individual flowers, flowerheads orange maturing to brilliant crimson, winter to summer, sow autumn.	2.5 x 3 m
<b>Mimetes chrysanthus</b>	Proteaceae
Golden pagoda, Gouestompie.	
An upright shrub with dramatic yellow, scented flower heads. Responds well to pruning after flowering.	2 m
<b>Mimetes cucullatus</b>	Proteaceae
Common pagoda, Rooistompie	
Erect multi-stemmed shrub, flower heads bright red and yellow with prominent silky stamens, at the tips of branches, very showy, flowering occurs almost all year, mainly from mid winter to early summer; sow in autumn, sought after shrub.	0.5 - 1.5m
<b>Mimetes fimbriifolius</b>	Proteaceae
Tree pagoda, Maanhaarstompie	
Tree or large rounded shrub, single trunk with thick corky bark, cylindrical flowerheads reddish yellow, spring - summer, sow autumn.	2 - 5 m
<b>Paranomus reflexus</b>	Proteaceae
Vanstadens scepter	
Branched shrub, leaves of two forms: low down on stem are dissected and upper leaves are entire, showy cream flower spikes, winter-autumn, sow in autumn.	1.5 - 2 m
<b>Protea 'Andrea'</b>	Proteaceae
Large, striking, medium pink-red flower with numerous series of bracts. It has a high yield, long, straight stems, flowers from mid-July to mid-September.	
<b>Protea 'Brenda'</b>	Proteaceae
Medium-sized, deep pink-red flower with a shiny, smooth texture. It has a high yield and flowers from May to July.	

<b>Protea 'Cardinal'</b>	Proteaceae
An outstanding eximia-type, medium-sized, deep pink-red flowerhead with a satin sheen, long straight stems and high yield, November to February.	
<b>Protea 'Embers'</b>	Proteaceae
A medium-sized flower, each bract a deep red at the tip and creamy-white basally. It has a shiny smooth texture and flowers in March to mid-May. Makes a particularly good garden subject.	
<b>Protea 'Pink ice'</b>	Proteaceae
This hybrid has silvery-pink flowerheads and is a vigorous grower. The flowering time is from January to June.	
<b>Protea 'Red Baron'</b>	Proteaceae
A small to medium-sized flowerhead with dense, brilliant deep red bracts lined with short, white hairs, it has a high yield and flowers from mid-June to mid-September.	
<b>Protea 'Riana'</b>	Proteaceae
(? <i>magnifica</i> x <i>longifolia</i> ) A rounded shrub with a spread of up to 1.8m. Flowers from the end of May to mid July, flowerheads a deep pink-red with a white beard and black centre. A good garden subject and good export quality cut flower.	
<b>Protea 'Rita'</b>	Proteaceae
(compacta x <i>magnifica</i> ) A good garden subject with spread up to 1.5m and highly desirable, export quality, pink flowerheads from early August to mid September.	
<b>Protea 'Sneyd'</b>	Proteaceae
A medium-sized deep-red flower. It has a high yield and good stem length, flowering time is from mid January to March.	
<b>Protea 'Susara'</b>	Proteaceae
A medium flower with an unusual shape, soft salmon-pink and light red shades. It produces a very high yield on exceptionally long stems and flowers from mid-March to May. Tolerates slightly alkaline soil.	

<b>Protea 'Sylvia'</b>	Proteaceae
A medium-sized, deep pink-red eximia-type flowerhead with satin sheen, it has a high yield and flowers from November to February.	
<b>Protea acuminata</b>	Proteaceae
Black-rim sugarbush, Sederbergroos.	
Small shrub, white or pink flowerheads, good cut flower.	1 - 2 m
<b>Protea aristata</b>	Proteaceae
Ladismith protea, Klein-den-suikerbos	
Neat shrub covered in pine needle-like foliage, large brilliant crimson bell-shaped flower heads in summer, sow in autumn.	1.5 m
<b>Protea aurea subsp. aurea</b>	Proteaceae
Common shuttlecock sugarbush, Kerse	
Large shrub, oblong cordate leaves, long buds, cream or pink flowerheads from mid summer to mid winter, sow in autumn, responds well to cultivation; good cut flower.	3 - 5 m
<b>Protea aurea subsp. potbergensis</b>	Proteaceae
Potberg sugarbush, Kerse	
Large shrub, slender buds, cream-yellow flower heads from autumn to late winter, sow in autumn.	3 - 5 m
<b>Protea burchellii</b>	Proteaceae
Burchells protea, Suikerbos	
Spreading shrub, medium to large deep cup-shaped flower heads vary from white or pink to dark red, floral bracts have distinctive sheen, flowers in winter, sow in autumn, responds well to cultivation, good cut flower.	1-2m
<b>Protea caffra</b>	Proteaceae
Common sugarbush, Gewone suikerbos.	
Small gnarled tree, medium-sized shallow, open, goblet-shaped flowerheads with pink or red glabrous bracts, summer flowering, occurs from eastern Cape into the Transvaal.	3-5 m
<b>Protea canaliculata</b>	Proteaceae
Bergroos suikerbos, Groove-leaf sugarbush.	
Rounded shrub, narrow leaves, pink or red flowers from March to June.	1-2m

<b>Protea compacta</b>	Proteaceae
Botriver protea, Suikerkan	
Erect sparsely branched lanky shrub, long cup-shaped flower heads, bright pink, occasionally white, from autumn to spring, excellent cut flower, sow in autumn.	2 - 3.5m
<b>Protea coronata</b>	Proteaceae
Green sugarbush, Groenhofiesuikerbos.	
Erect shrub, silvery leaves, deep cup-shaped bright apple green flower heads from autumn to spring, sow in autumn.	2-5m
<b>Protea cynaroides</b>	Proteaceae
King protea, Reuse-protea, Izadlung	
Upright shrub, huge flower heads, pink bracts silvery white centre, from winter to summer, attracts birds, sow in autumn.	0.3-2m
<b>Protea eximia</b>	Proteaceae
Broad-leafed sugarbush, Breëlblaarsuikerbos.	
Erect shrub, foliage greyish-green to purplish-green, large flowerheads with brilliant red bracts and purple black centre, summer, sow autumn, easily cultivated.	2-5m
<b>Protea glabra</b>	Proteaceae
Clanwilliam sugarbush, Kaiingsuikerbos.	
A large conical shrub with attractive pink flowers in spring	5 m
<b>Protea grandiceps</b>	Proteaceae
Red sugarbush, Rooisuikerkan	
Compact tidy rounded shrub; blue-green leaves; numerous bright coral-pink flower heads with white or dark fringe; sow in autumn; very decorative garden shrub and a good cut flower.	1-2m
<b>Protea lacticolor</b>	Proteaceae
Hottentots Holland sugarbush, Witsuikerbos	
Neat erect shrub, large blue-green leaves; floral bracts with light reflecting fringe of hairs, bracts milky creamy-white or shades of pink, summer to winter, sow autumn, decorative shrub; good cut flower.	2-6m

<b>Protea laetans</b>	Proteaceae
Blyde sugarbush, Blydesuikerbos.	
A slender tree with attractive grey-black fissured bark.	5 m
Showy deep carmine flowers with silvery or red-brown hairs are borne in early winter. This is a rare species from the Blyde River escarpment	
<b>Protea lanceolata</b>	Proteaceae
Lance-leaf sugarbush, Smalblaarsuikerbos.	
Erect shrub, inflorescence greenish-white, during winter.	2-4 m
<b>Protea laurifolia</b>	Proteaceae
Grey-leaf sugarbush, Louriersuikerbos.	
Tree-like shrub, similar to <i>Protea neriifolia</i> , foliage blue-green, leaves have heavy horny margins, flowers at anytime, colour varies from soft rose to off-white.	5 m
<b>Protea lepidocarpodendron</b>	Proteaceae
Black-bearded sugarbush, Swartbaardsuikerbos.	
Large erect shrub; long white or pink floral bracts edged with a heavy black and white beard, flowers from autumn to spring; sow in autumn; good cut flower.	2-3m
<b>Protea longifolia</b>	Proteaceae
Long-leaf sugarbush, Langblaarsuikerbos.	
Sprawling shrub, long narrow leaves, pointed, almost transparent white, pink or green floral bracts surrounding a pyramid of massed black hairy flowers, produced from autumn till spring, hybridises freely, good cutflower	1.5 m
<b>Protea lorifolia</b>	Proteaceae
Strap-leafed sugarbush, Riemblaarsuikerbos.	
Large shrub, large grey leaves, flowerheads cream with chocolate centre, autumn and early summer.	
<b>Protea magnifica</b>	Proteaceae
Queen protea, Baardsuikerbos	
Robust sprawling shrub, grey or blue-green strap-like leaves, very large flower heads, heavily bearded white to deep carmine bracts surround hairy black-tipped flowers clustered at the centre, sow in autumn, magnificent shrub and cutflower.	1-2m

<b>Protea mundii</b>	Proteaceae
Forest sugarbush, Witsuikerbos	
Tall shrub or tree, pioneer to forest, elliptic dark green leaves, small oblong flower heads with cream or pink bracts from mid summer to mid winter, sow in autumn; good cut flower.	3-12m
<b>Protea nana</b>	Proteaceae
Mountain rose, Skaambloem	
Upright growth habit, densely branched neat compact shrub, bright green needle-like leaves, small pendulous wine-red flower-heads in winter-spring, sow autumn, expect germination from 25 days, flowers in 4th year from seed.	1.25 m
<b>Protea neriifolia</b>	Proteaceae
Oleanderleaf protea, Blousuikerbos	
Large shrub, narrowly oblong bright green leaves, large oblong flower heads, bracts pure white, pale pink, deep pink or wine red, fringed with black or brown and white beard, sow in autumn, good cut flower; tolerates a wide range of soils.	3 m
<b>Protea nitida</b>	Proteaceae
Wagon tree, Waboom	
Small gnarled tree or multistemmed shrub, leaves large blue-green to silver-grey, new growth bright red, floral bracts cream to pink, autumn-spring, sow autumn, frost tolerant, suitable for coastal gardens.	1-5m
<b>Protea obtusifolia</b>	Proteaceae
Bredasdorp sugarbush, Bredasdorpsuikerbos	
Large rounded shrub, rich dark green leaves with rounded tips, large oblong flower heads with tightly overlapping shiny white, pink or red bracts, from autumn to spring, sow in autumn; successfully cultivated, good cutflower.	2-4m
<b>Protea pudens</b>	Proteaceae
Bashful sugarbush, Aardroos.	
Attractive groundcover, prostrate, prefers alkaline soil, attractive bracts, flowers pink with white hairs, flowerheads bell-shaped, leaves linear.	1 m

<b>Protea punctata</b>	Proteaceae
Waterlily sugarbush, Waterwitsuikerbos	
Rounded shrub, oval sessile blue-green to grey leaves, small attractive flower heads, pink or white bracts opening wide and flat in characteristic 'waterlily-like' form, from late summer to winter, sow in autumn; easily cultivated, good cutflower.	2-4m
<b>Protea repens</b>	Proteaceae
Common sugarbush, Suikerbos.	
A tough bushy shrub with white or pink nectar laden flowerheads. Attracts birds, good cut flower. Full sun.	1-4 m
<b>Protea roupelliae</b>	Proteaceae
Drakensberg protea	
A small, upright tree. Deep pink, goblet-shaped flower-heads in summer to autumn. Plant in well-drained soil. Full sun. Water well in summer. Occurs naturally on Witwatersrand.	3-8 m
<b>Protea rubropilosa</b>	Proteaceae
Transvaal protea, Transvaalbergsuikerbos	
Small tree, dark brown velvety involucre bracts, open to form shallow saucers with red inner surfaces, spring flowering, sow spring, a summer rainfall Protea.	1 - 8 m
<b>Protea scolymocephala</b>	Proteaceae
Thistle sugarbush, Scoly, Witskollie	
Dense rounded shrub, small bowl shaped creamy green flowerheads occasionally flushed pink-red, free flowering, late winter to summer, sow autumn, easily cultivated, good cutflower, decorative garden shrub.	1.5 m
<b>Protea speciosa</b>	Proteaceae
Brown-bearded protea, Bruinbaardsuikerbos	
Flowerheads pink with brown beard.	1m
<b>Protea subvestita</b>	Proteaceae
Lippeblomsuikerbos, Waterlily sugarbush	
Large upright bushy shrub or small tree, involucre bracts pink or creamy white, inflorescences oblong, tips of innermost floral bracts characteristically bend outwards, a summer rainfall Protea, sow spring, frost tolerant.	1 - 3 m

<b>Protea susannae</b>	Proteaceae
Stink-leaf sugarbush, Stinkblaarsuikerbos.	
Large robust shrub, crushed leaves give off sulphurous odour, oblong brownish pink flower heads, from early autumn to early spring, sow in autumn, hybridises freely, good cut flower.	2-3m
<b>Protea venusta</b>	Proteaceae
Creeping beauty, Rotssuikerbos	
Sprawling or prostrate shrub, bell shaped flower heads with pink tipped bracts are carried close to the ground but not resting on it, the stems bending upward to display the blooms, flowers from summer till autumn, sow autumn.	0.7 x 3 m
<b>Protea welwitschii</b>	Proteaceae
Dwarf savanna sugarbush, Welwitsch-suikerbos.	
A large rounded shrub with attractive grey-brown bark. Creamy-white, hairy, honey scented flowers are borne in late summer. This is a widespread species from the savannah areas of southern Africa.	1.5 m
<b>Serruria adscendens</b>	Proteaceae
Kleinmond spiderhead.	
A low shrub with creeping red branches and divided leaves. Rounded silvery pink scented flowers are borne from late winter to early summer. A social species that likes to grow in clumps.	300 mm
<b>Serruria aemula</b>	Proteaceae
Strawberry spiderhead	
Low shrub with creamy pink flowers in summer, grows on sandy flats.	300mm
<b>Serruria brownii</b>	Proteaceae
Small, dense, lush little shrub, recommended for shale soils. Pinkish flower-heads are produced in spring, very rare.	
<b>Serruria cyanoides</b>	Proteaceae
Wynberg spiderhead	
A small vulnerable Serruria now found in only 2 localities on the peninsula, compact shrub, attractive flowers from July to November, unusual groundcover	400 mm

<b>Serruria elongata</b>	Proteaceae
Stalked spiderhead	
Elegant low shrub, bright green leaves tightly grouped in pseudo-whorls around the base of the peduncle; perfumed flower heads in clusters on very elongate common peduncle, flowers from winter through to summer, sow in autumn.	0.3-0.5m
<b>Serruria florida</b>	Proteaceae
Blushing bride, Trots van Franschhoek.	
An erect shrub. The well known large attractive pink flowers with well developed bracts are borne in clusters of up to 8 heads per branch from Jun - Sep; sow seed in autumn; quick-growing but short lived; will flower 15 months from germination.	0.8 - 2 m
<b>Serruria foeniculacea</b>	Proteaceae
Erect shrub, clusters of numerous pink flowerheads, October to November, sandy soil.	400 mm
<b>Serruria glomerata</b>	Proteaceae
Cluster spiderhead	
Cape Peninsula endemic. Compact rounded shrub; numerous creamy hairy flowers densely clustered on short common peduncle, from late winter to early summer; sow in autumn.	300-600mm
<b>Serruria pedunculata</b>	Proteaceae
Fanleaf spiderhead	
Spreading shrub; distinctive much divided leaves in fan-like shape; conspicuous pinkish-grey hairy flower heads, from winter till early summer; sow in autumn; responds well to propagation by seed; decorative garden shrub.	700mm
<b>Serruria rubicaulis</b>	Proteaceae
An attractive groundcover with red branches and upright dissected leaves. Large trusses of silky pink flowers are borne in spring..	
<b>Spatalla incurva</b>	Proteaceae
An erect much branched shrub with attractive heads of mauve flowers, September to March. Suitable for fynbos gardens.	1m





## GROWING RESTIOS

Together with Proteaceae and Ericaceae, the Restionaceae family is one of the major components of the fynbos. There are more than 300 species of restio in southern Africa. Restios are fine reed-like plants often mistaken for grasses. The main difference between restios and grasses is the presence of separate male and female plants in restios..

*Restio* stems are called culms and are produced close together to form attractive tussocks, varying in height from 0.5 to 4 m. Some species have papery sheaths and/or branched vegetative stems at regular intervals up the culm. Showy papery bracts, which vary in colour from pale brown to glossy chestnut, hide the small flowers. The restio bracts and sheaths rustle mysteriously in the wind or on a hot day crackle and pop in the heat.

### Natural habitats

Restios are a diverse group of plants, some of which grow in very wet conditions, while others are found in drier areas. The majority of restios experience seasonally wet conditions in winter and periods of drought in summer.

Restios have a network of shallow fibrous roots, which enable them to use

moisture, captured from mist, dew or coastal fog. This helps them survive through the long summer months. Restios are found growing in the following habitats:

- Mountain slopes and plateaux - sandy acidic soils, deep sands or rocky pockets,
- Coastal plains - acidic deep sands but occasionally alkaline,
- Along stream banks and wetlands - moist to wet conditions and acidic sandy soil often rich in organic matter.
- Growing in a garden with better soil and regular watering restios are often more vigorous than in the wild.

### Garden uses

Restios with their strong forms and interesting textures are an exciting addition to a garden both as single feature plants and as large textural sweeps.

As one of the main components of fynbos vegetation, restios look very attractive when planted together with proteas and ericas. The smaller species such as, *Elegia cuspidata*, *Elegia stipularis*, *Thamnochortus cinereus*, *Thamnochortus pellucidus* and *Restio festuciformis*, can be used mixed with smaller proteas or ericas to form a mini-fynbos garden.

Single plants of *Elegia capensis*, *Calopsis paniculata* or *Restio quadratus* will form a large bamboo-like stand after a few years if left undisturbed. *Thamnochortus insignis* or *Chondropetalum tectorum* form large elegant tussocks. These large species can be used as feature plants. *Elegia capensis* looks especially stunning next to a swimming bath or water feature. If

planted close together they can form wide and dense hedges.

The small tufted species like *Elegia stipularis* and *Thamnochortus pellucidus* make unusual pot plants. While the larger tussock forming species, with their elegant arching habit, work well in half barrels or very large pots.

Nearly all the restios can be used in flower arrangements to provide height and contrasting shape, and *Elegia capensis*, *Calopsis paniculata* and *Ischyrolepis subverticillata* are excellent foliage plants.

Good companion plants for smaller plantings of restios or for single plants are *Geranium incanum* with lilac flowers, *Chironia laxa* with large purple flowers, *Helichrysum cymosum* with small grey-green leaves, *Limonium perigrinum* with lacy bright pink flowers or the striking grey-leafed *Plecostachys serpyllifolia*.

### Growing conditions

Plant in full sun, although a few species will tolerate light shade.

- Ensure good air movement.
- Do not use insecticides.

### Soil preparation

The soil should be well drained and preferably acidic, although *Thamnochortus insignis* and *T. pellucidus* can also grow in slightly alkaline soils. The ground should be dug over and grass and weeds removed. Restios do not like soil competition and should not be planted in the middle of the lawn.

Plant restios in holes of 600 mm<sup>2</sup> and 400-600 mm deep. The soil that is removed from the planting hole should be well mixed with about two spades of well rotted compost and then replaced in

the planting hole.

Restios may be fed with organic fertilizers such as Seagro or Kelpak, or by sprinkling the surrounding soil with a small amount of ammonium sulphate during the growing season. They will respond to regular watering by producing more robust growth, but they are essentially plants adapted to a long dry season.

### Plant management and longevity

The best time for planting is in autumn or early winter after the first good rains, but restios can be planted at any time as long as they can be watered regularly. It is important that the soil in the bags is wet when the plants are planted out. They should be planted at the same level as they were in the bags, and watered well after planting. After about 6 weeks the young restio plants should show signs of new growth.

Like most other fynbos plants, restios will benefit from a mulch of milled pine bark or rough compost. The mulch keeps the roots cool, reduces the water evaporation and reduces the germination of weeds.

Maintenance consists of the removal of dead stems, especially with species like *Ischyrolepis subverticillata* and *Thamnochortus cinereus*. The dead stems of the more grass-like species like *Restio festuciformis*, *Restio brachiatus* and *Restio similis* can be left on the plant, as they will be hidden by the new growth. It is important not to damage the new growth, as once damaged, the stems will die.

All the old stems of a whole plant can be removed at the same time, as long as the new shoots are about 5 cm high and

are not damaged by the removal of all the other stems. This will set the plant back though, as the green stems are needed to provide the energy for the new shoots to grow properly.

Most of the restios have a long life span, *Thamnochortus insignis* can live 20 years or longer, but *Restio festuciformis* is at its best a year after planting and should be replaced after 2 years.

### PROPAGATION.

#### Vegetative propagation

Restios can be propagated vegetatively by division. The stoloniferous species can be most successfully divided just before the crop of new shoots emerges from the ground, generally in early or mid winter. The plants should be divided in fairly large pieces, the roots disturbed as little as possible, and planted out immediately in the open ground or in bags. After transplanting the plants should be well watered until the new shoots are growing and the plant has 'taken'. Generally the plants take up to a year to start growing again and do not seem to grow as vigorously as plants raised from seed.

#### Seed

Most restios raised from seed grow vigorously and produce a well-shaped plant.

The germination percentage of most restio seed is very low, varying from 0.2% to about 8%. Germination can be improved considerably with smoke-treatment. This can be in the form of actual smoke, smoke extract in water or specially prepared paper disks which are impregnated with smoke extract and

hormones (see page ). This last method is very suitable for small quantities of seed.

The seeds are sown on a sandy, well-drained soil mixture and then covered with a thin layer of milled pine bark. After smoke-treatment the seed-trays should be well watered and placed in a well-ventilated area, as restios need free air movement at all stages of their development.

The seed is best sown in late summer or early autumn. The first seedlings should appear after three to four weeks. The later in the season the seeds are sown, the longer the germination takes. After 6 weeks to 3 months the seedlings

can be pricked out into 12-packs or multi-way trays, filled with a fynbos potting medium. The seedlings need to be sheltered from heavy rain until well established.

About three months later the small plants can be potted up into 1 l containers and should be ready for planting out during the winter. The whole process from sowing to planting out takes about one year but the size of the plants after a year varies greatly, depending on the species sown. Seedlings should be watered regularly. Under hot conditions the young plants do better in light shade.

## Restios

<b>Calopsis paniculata</b>	Restionaceae
Besemgoed	
Tall plants spreading to form large groups of finely branched stems. Flowers during April/May, female plants having small white flowers, the males are less showy. The mature stems can be used for foliage in the cut flower industry.	1.75 - 2.5 m
<b>Chondropetalum aggregatum</b>	Restionaceae
Hermanus riet	
Very attractive upright tufted plants. The young stems are a beautiful blue green in colour with large chestnut brown sheath. This species can be used as a feature plant or in small groups. It requires well drained soil, full sun and regular watering.	1.5m
<b>Chondropetalum mucronatum</b>	Restionaceae
Erect rhizomatous thick stemmed tussock; large golden brown bracts on female inflorescences; large golden brown inflorescences on male plants; sow in autumn; only suitable for stream edges and marshy areas.	2m
<b>Chondropetalum sp.nova (469/84)</b>	Restionaceae
Upright tufted plant, attractive blue-green stems, pale brown papery sheaths and bracts, January to March, full sun.	1m

<b>Chondropetalum tectorum</b>	Restionaceae
Thatching reed, Dekriet	
Very attractive ornamental plant, 2m in diameter, upright, tufted form and thin, dark green stems. The new stems, rise up in the centre of the plant each year, are very attractive with their nearly black sheaths. It can be used as a feature plant.	1.5 x 2m
<b>Elegia capensis</b>	Restionaceae
Fonteinriet.	
A very ornamental large feature-plant. Produces a clump of tall, erect strongly growing stems with evenly spaced whorls of foliage that result in a horsetail effect. One of the most beautiful species for the garden, moist areas full sun or semi-shade.	2m
<b>Elegia cuspidata</b>	Restionaceae
Blombiesie.	
Spreading tussock 1 m in diameter. With brown bracts, an attractive accent plant. Sow in autumn.	1m
<b>Elegia equisetacea</b>	Restionaceae
Upright spreading plant with finely divided sidestems in regular tufts along the main stem, full sun in moist or well-watered area.	1 m
<b>Elegia fenestrata</b>	Restionaceae
Chestnut brown spathes mostly falling before flowers mature, marshy places, rare and endangered.	1.5-2m
<b>Elegia grandispicata</b>	Restionaceae
Upright tufted plant, attractive blue-green stems with pale brown papery sheaths and chestnut brown inflorescences in spikes up to 200 mm long surrounded by large light brown spathes, October to February, needs full sun and well-drained soil.	1.5 m
<b>Elegia racemosa</b>	Restionaceae
Rustling reed, Fluisterriet.	
An erect tussock, easy and fast to grow, upto 1.5 m in diameter, attractive blue-green stems, pale brown papery sheaths and bracts, January to March, full sun. A beautiful accent and form plant that is a must in a fynbos garden.	1.75m

<b>Elegia stipularis</b>	Restionaceae
Cushion restio. One of the most attractive smaller restios, upto 750mm in diameter, a dense mass of thin, branched stems with pinkish golden bracts, fading to light brown. Full sun and sandy well drained soil.	500 mm
<b>Ischyrolepis sieberi</b>	Restionaceae
Rounded tussock, 1.5m in diameter with fine single stems and dark brown inflorescences, suitable for dry sandy areas, full sun.,	900mm
<b>Ischyrolepis sp.</b>	Restionaceae
Tufted many stemmed plants forming a compact plant 800 mm in diameter, suitable for planting in small or large groups, full sun and well drained soil	750 mm
<b>Ischyrolepis subverticillata</b>	Restionaceae
Besemriet. An ornamental, spreading plant, 1.5 m in diameter, finely branched, dark green foliage. Suitable for planting in groups or as accent plant, full sun or semi shade..	2m
<b>Restio bifarius</b>	Restionaceae
Erect tussock, reddish bracts, occurs on Peninsula.	0.8m
<b>Restio brachiatus</b>	Restionaceae
Stroompiesriet. A graceful, much branched compact plant; fine stems, up to 1.5 m in diameter growing in full sun in well-drained sandy soil. A good contrast plant for fynbos gardens, growing much taller in moist situations. Erect tussock.	1.5m
<b>Restio festuciformis</b>	Restionaceae
Groengrasriet. A very attractive small restio up to 600 mm in diameter. Young foliage is bright green with golden brown inflorescences in late summer to winter. A species from moist areas, it grows to flowering size in one year in well-drained sandy soil in full sun.	400 mm
<b>Restio multiflorus</b>	Restionaceae
Attractive upright tufted plants, the sparsely branched stems rising out of the mass of finely branched juvenile stems, inflorescences with dark brown bracts, use as accent plant in full sun, dry sandy conditions.	1.7 m

<b>Restio quadratus</b>	Restionaceae
Spreading plant forming large groups, finely branched stems, full sun, moist areas.	1.75 m
<b>Restio sp.</b>	Restionaceae
Upright, tufted plant, sparsely branched stems with 1.5m brown panicles of inflorescence, attractive bright green juvenile foliage, full sun, sandy soil.	
<b>Restio tetragonus</b>	Restionaceae
Erect dense tussock with dark brown seedheads during summer, full sun, well drained soil, plant in small groups.	900mm
<b>Restio triticeus</b>	Restionaceae
Erect tussock, hardy plant with small brown inflorescence, full sun; sow in autumn.	700mm
<b>Rhodocoma arida</b>	Restionaceae
Droogteriet.	
Upright, tufted plants, thin wiry blue-green stems. Use in groups or in mixed fynbos plantings. Require well-drained soil and full sun. Can be grown in dry areas and do not require regular water once they are established.	2m
<b>Rhodocoma capensis</b>	Restionaceae
Attractive dark green foliage plant, finely branched, accent plant or in groups in open beds, full sun, well-watered position.	1.2 - 2 m
<b>Rhodocoma foliosa</b>	Restionaceae
Langebergriet	
Upright spreading plants, 2m in diameter, attractive 1.7m finely branched juvenile foliage, forming dense plants with arching fronds tall golden brown inflorescences, full sun, well drained soil.	
<b>Rhodocoma gigantea</b>	Restionaceae
Attractive finely branched juvenile foliage later forming tall tussock with golden brown inflorescence; sow in autumn; grow in full sun.	2-3m
<b>Staberoha vaginata</b>	Restionaceae
Erect tussock, Peninsula.	600mm

<b>Thamnochortus acuminatus</b>	Restionaceae
Very ornamental, clump-forming reed-like perennial, soft greyish-green stalks, attractive chesnut brown inflorescences, late summer, sow autumn.	300 mm
<b>Thamnochortus cinereus</b>	Restionaceae
Silverreed, Silverriet.	
Very attractive compact tufted plants with silvery green foliage and very decorative long plumed inflorescences, silvery grey for the male and chestnut brown or silvery for the female. Up to 1 m in diameter. Tough plants growing in full sun.	0.5 - 1 m
<b>Thamnochortus fruticosus</b>	Restionaceae
Attractive velvety grey young stems with golden bracts which develop into slender stems with silvery green foliage. This species has a spreading habit and prefers a well-watered position in full sun. It is suitable for planting in low fynbos plantings.	600 mm
<b>Thamnochortus insignis</b>	Restionaceae
Thatching reed, Dekriet.	
Very attractive ornamental plant, can be used in the lawn with rocks around it, rockeries and open beds, beautiful pot plant, moist to dry sandy conditions, full sun	2 m
<b>Thamnochortus lucens</b>	Restionaceae
Tufted elegant reed-like perennial, decorative dark golden brown inflorescences, sow in autumn, requires well-drained sandy soil and full sun, effective accent plant or in groups.	600 X 900mm
<b>Thamnochortus pellucidus</b>	Restionaceae
Dwergriet	
Compact tufted plant; thin green fertile stems rising from a circle of finely divided infertile stems. Golden brown flower head, provides a show for about four months. A most attractive small restio. Sow in autumn; grow in full sun and well drained soil.	600mm
<b>Thamnochortus punctatus</b>	Restionaceae
Clump-forming rhizomatous reed-like perennial; brown spots on spikes; golden brown inflorescence; sow in autumn; grow in full sun; ornamental; good accent plant or in small groups.	400 - 600mm

# **Thamnochortus spicigerus**

Restionaceae

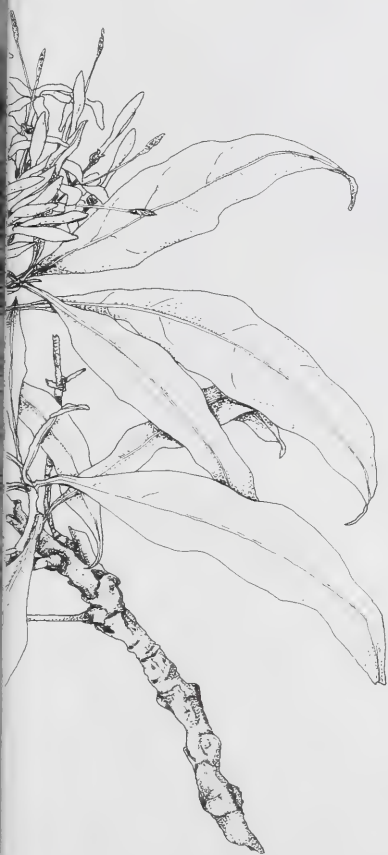
Dekriet

Forms large tussocks, arching habit, good accent plant and companion to other 'Fynbos' plantings, golden brown inflorescence, 200mm long, May to June.

1-2m







## SHRUBS

South Africa is endowed with an extensive range of shrubby plants. Shrubs are multi-stemmed woody perennial plants that are represented in numerous plant families and occur in many different sizes and shapes. The gardener can choose from these many wonderful forms, textures, and flower colours. Shrubs are very useful as they are long lasting and give body and form to the garden.

### **Adaptable plants**

Indigenous shrubs are found in a variety of habitats that include Mediterranean, semi-desert, sub-tropical, savanna and strandveld to name a few. This range of habitats and our diverse climate is the reason that we find such a wealth of shrubs. Diversity within our plant flora extends to the many types of birds and insects that are attracted to their fruits, nectar and seeds. Gardening with indigenous shrubs can therefore encourage many birds and butterflies to visit your garden, which can be a most satisfying experience.

Indigenous shrubs are adapted to the climatic regions in southern Africa. It is nevertheless important when selecting plants to be aware of their origins and

requirements. Plants from the winter-rainfall regions of the country require to be kept wet in winter and the sensitive species to be protected from dry frosts.

Most summer rainfall plants are however more adaptable and grow well in the winter rainfall region with some additional summer water. Some tropical species might not do so well, but our experience is that when provided with a warm protected position and regular feeding they will thrive.

### Landscaping with shrubs

Shrubs should be selected and placed in gardens for a specific purpose. Special attention to this will help gardeners make the right choice of shrub.

Please remember that plants only flower for a relatively short period in the year. Your choice should therefore also be determined by other factors such as plant size and form, leaf colour, texture and shape.

Shrubs can serve as fillers, but should not be packed into the garden merely to fill up an area. Careful placement can help create a feeling of depth even in small gardens. Try to plant at varying distances and in a way that leads the eye towards a feature.

Features can be: a plant with dramatic form, a water feature, statue or large pot. Tall shrubs can also be used as the framework for shaping an outdoor room or space. This is commonly used to divide a larger garden into smaller functional areas.

### Care and maintenance

The beauty and sustainability of a garden depends upon its maintenance. Shrubs are generally long lasting and hardy, but

they also need to be looked after if they are to retain their attractive form. Thorough preparation of the site is essential for good results. The area should be well dug over to loosen and aerate the soil. Liberal quantities of good quality well-rotted compost should be dug in. The ground can be further enriched with bonemeal and a slow release chemical fertilizer such as 2:3:1. This practice is recommended for all indigenous shrubs except true fynbos species such as Proteas, Ericas and buchu (Rutaceae). Consult the chapters on fynbos plants and fynbos potting compost for further information.

Choose good quality and healthy plants from the nursery. Old root bound plants are difficult to resurrect. Loosen the soil gently around the root ball before planting in the planting hole. Place well-rotted organic material, bonemeal and slow release fertilizer into the planting hole and around the plant. Firm the soil down around the plant and water well. The addition of a thick layer of mulch will keep the soil cool and moist and keep weed growth to a minimum. Additional feeding will be necessary during the warm growing seasons from spring to autumn. Add 3:2:1 to promote foliage growth and 3:1:5 to promote flowering. Sprinkle the fertilizer around the base of the plant at approximately two monthly intervals during the growing season.

Pruning can ensure a good quality plant and extend its life. Removing old wood and flowers helps to concentrate the plant energies into vegetative growth and can result in better flowering. Use good quality sharp secateurs and prune after flowering. Choose a bud pointing in the direction you want the new branch to

grow when you make your cut.

The use of indigenous shrubs has traditionally been limited to a few faithful species. This manual will expose you to many more jewels of South African flora which up to now have been sadly neglected.

## Shrubs

<b>Acokanthera oblongifolia</b> Dune poison bush, Duinegifboom Large shrub, evergreen, glossy dark green leaves, masses of fragrant flowers in spring, fleshy purplish-black highly toxic fruits in autumn.	Apocynaceae  3-7m
<b>Acokanthera oppositifolia</b> Bushmans poison Boesmansgif Large shrub, leathery glossy dark green foliage, young leaves reddish, fragrant white flowers in clusters in spring, fleshy red to purplish fruits in summer, sow spring or autumn, a good shade plant. NB all parts of this plant are poisonous.	Apocynaceae  2-5m
<b>Acokanthera rotundata</b> Bushmans poison, Boesmansgif Attractive sweet smelling flowers, hard angular foliage, good shade plant.	Apocynaceae  3m
<b>Acridocarpus natalitius</b> Moth fruit Shrub tending to scramble, leathery shiny leaves, flowers deep yellow, ideal garden subject.	Malpighiaceae
<b>Anastrabe integerrima</b> Pambati tree, Pambatiboom Large shrub or medium tree, attractive flowers and foliage, compact root habit, ideal screening plant and for small gardens.	Scrophulariaceae  5 m
<b>Anisodonteia anomala</b> Thick-leaved shrub with magenta or rose-pink flowers, suitable for arid gardens.	Malvaceae 1m
<b>Anisodonteia capensis</b> Wild hibiscus. A compact shrub with attractive pink flowers in spring and summer. Well suited to coastal gardens.	Malvaceae  1.5 - 2 m

<b>Anisodonteia elegans</b>	Malvaceae
A small erect multistemmed shrub with large deep pink-purple showy flowers in spring and summer.	1 m
<b>Anisodonteia julii</b>	Malvaceae
Attractive shrub, large pink flowers, distinctive foliage, ideal plant for background planting in a mixed perennial border.	1-2 m
<b>Anisodonteia scabrosa</b>	Malvaceae
Pink mallow	
Bushy upright shrub, pink flowers in masses during summer, easily cultivated, fast growing and suitable for coastal gardens, sow autumn or spring, prune in autumn to keep neat.	1-2m
<b>Aspalathus aspalathoides</b>	Fabaceae
Erect or spreading shrublet with flat leaves; flowers yellow in early summer; sow in autumn.	100-400mm
<b>Aspalathus linearis subsp. linearis</b>	Fabaceae
Bush tea, Rooibostee	
Slender shrub, simple linear leaves, yellow flowers spring-summer, sow autumn.	0.3-2m
<b>Aspalathus nivea</b>	Fabaceae
Kapokbossie	
Upright shrub, silvery foliage, pale yellow 'pea' flowers during summer, sow in autumn.	0.8- 3 m
<b>Aspalathus spicata</b>	Fabaceae
Erect or spreading shrub with spine-tipped leaves; flowers yellow to orange, spring to summer; sow seed in autumn.	0.2-2m
<b>Athanasia crithmifolia</b>	Asteraceae
Klaaslouwbos	
Flowers deep yellow, occurring in umbels at tips of branches.	1.5-2m
<b>Athanasia dentata</b>	Asteraceae
An upright fast growing shrublet with grey leaves and yellow flowers in spring and summer. Suited to sunny positions, good for fynbos and coastal gardens.	600mm-900m

**Athanasia parviflora**

Kaaslouwbos.

Erect woody shrub, heads of yellow flowers in summer.

Asteraceae

1.5m

**Athanasia trifurcata**

An upright fast growing shrub with grey, three-lobed leaves and yellow flowers. Suited to a sunny position, good for fynbos and coastal gardens.

Asteraceae

2m

**Azima tetracantha**

Needle bush, Speldedoring

A large scrambler typical of coastal scrub with four straight spines at most nodes and whitish flowers in summer. A good coastal and barrier plant. Sow autumn or spring.

Salvadoraceae

2 m

**Barleria albostellata**

Grey barleria

Fast growing shrub, with woolly grey foliage and tubular white flowers in spring and throughout summer. Plant in sun in well-drained, compost-enriched soil. Water well in summer and less in winter.

Acanthaceae

1 m

**Barleria mackenii**

Glossy leaf, attractive purple flowers, full sun to semi shade, loamy soil, not as hardy as *B. obtusa*.

Acanthaceae

500mm

**Barleria rotundifolia**

Spiny yellow barleria

Attractive spiny shrub with shiny green leaves and large yellow flowers in summer. Full sun to light shade. Makes impenetrable hedge or low screen. Can be pruned back lightly. Drought and frost hardy.

Acanthaceae

2-3 m

**Bauhinia bowkeri**

White bauhinia, Keibeeklou

Scrambling shrub, sometimes a small tree; white flowers, petals up to 25 x 25 mm, early summer; sow in spring or autumn.

Fabaceae

3m

**Bauhinia galpinii**

Pride-of-de Kaap, Vlam-van-die-vlakte

Scrambling shrub, twin-lobed leaves, flowers bright brick-orange, late summer, cut down by frost but sprouts again, easy to grow, recommended. Plant in a warm sunny position preferably on a slope.

Fabaceae

3 - 5 m

<b>Bauhinia natalensis</b>	Fabaceae
Natal bauhinia	
Small dainty shrub, white flowers.	1 - 1.5 m
<b>Bauhinia petersiana</b>	Fabaceae
White bauhinia, Koffiebeeskloof	
Spreading shrub or small tree; large showy white flowers, petals 80 x 15 mm, in midsummer; sow seed in spring; grow in full sun and sheltered position.	3-4m
<b>Bauhinia tomentosa</b>	Fabaceae
Bush neats foot, Bosbeeskloof.	
Decorative shrub with drooping branches, bell-shaped yellow flowers in summer, sow spring.	2 - 4 m
<b>Berzelia abrotanoides</b>	Bruniaceae
An upright growing fynbos shrub. Cream heads in clusters with attractive red glands between the flower heads, moist conditions, good cut flower.	1 m
<b>Berzelia galpinii</b>	Bruniaceae
An upright growing fynbos shrub. Large cream flowers-heads in clusters, August, many branches.	2 m
<b>Berzelia intermedia</b>	Bruniaceae
An upright growing fynbos shrub. Cream heads in clusters.	1 m
<b>Berzelia lanuginosa</b>	Bruniaceae
Vleiknoppiesbos	
Much-branched shrub, leaves soft and needle-like, cream flowers in globular flowerheads, good cut flower, sow autumn.	1.6 m
<b>Bowkeria citrina</b>	Scrophulariaceae
Yellow shell-flower bush	
Much branched shrub, leaves aromatic when crushed, beautiful bright yellow purse-like flowers in summer, sow spring.	1 - 3 m
<b>Bowkeria cymosa</b>	Scrophulariaceae
Transvaal shell-flower bush	
Shrub or small tree, white shell-like flowers in summer, moist areas.	3m

<b>Bowkeria verticillata</b>	Scrophulariaceae
Bushy shrub, flowers white and scented, summer.	5 m
<b>Brunia albiflora</b>	Bruniaceae
Stompies	
Attractive tall shrub, clusters of spherical white flowerheads, coffee-scented, sow autumn.	2 m
<b>Brunia laevis</b>	Bruniaceae
A compact grey-green fynbos shrub. Flowers cream-coloured, good cut flower.	900 m
<b>Brunia nodiflora</b>	Bruniaceae
Fonteinbossie	
An upright fynbos shrub. Cream flower heads, in autumn-winter, a good cut flower, sow in autumn.	1m
<b>Brunia stokoei</b>	Bruniaceae
Rooistompie	
Slender shrub, large red flower-heads, summer, sow autumn.	1-2m
<b>Buddleja auriculata</b>	Loganiaceae
Weeping sage, Treursalie	
Shrub or small tree; evergreen; arching branches; sweetly scented sprays of cream coloured flowers in spring, hardy.	2-4m
<b>Buddleja glomerata</b>	Loganiaceae
Karoo sage, Karoosalie	
Shrub or small tree; leaves bluish green, wrinkled, under surface rusty to silvery-white; flowers yellow in terminal heads, during summer, sow autumn.	2-4 m
<b>Buddleja loricata</b>	Loganiaceae
Bushy compact evergreen shrub with an attractive rounded growth form, flowers cream, summer.	
<b>Buddleja salviifolia</b>	Loganiaceae
Sagewood, Wildesalie	
Shrub or small tree, often many-stemmed from base; branches tend to droop; strongly scented mauve flowers in winter and spring, grows well in dry places, good windbreak, sow seed in autumn or spring.	3-8m

<b>Burchellia bubalina</b>	Rubiaceae
Wild pomegranate, Wildegranaat	
Decorative shrub or small tree, evergreen, glossy dark green leaves, showy scarlet to orange tubular flowers heads in early summer, sow spring or autumn, frost tender, does well in shade or partial shade.	2.5 - 5 m
<b>Buxus macowanii</b>	Buxaceae
Cape box, Kaapse buksboom	
A small neat bushy shrub that will eventually become a small tree, with delicate finely divided light green leaves. Grows best in light shade and may be clipped to shape.	2-5 m
<b>Carissa 'Green Carpet'</b>	Apocynaceae
A low growing dense evergreen shrub with large white scented flowers and red edible fruits. Ideal for coastal gardens and difficult banks, full sun or light shade.	500 mm
<b>Carissa bispinosa</b>	Apocynaceae
Num-num	
An upright dense evergreen shrub with clusters of small scented white flowers and small red edible fruits. A good barrier plant for a semi-shaded area, responds well to pruning.	2 m
<b>Carissa edulis</b>	Apocynaceae
Small num-num, Kleinnoemnoem	
Dense thorny shrub, glossy dark green foliage, masses of small fragrant white flowers in clusters in spring, followed by small oval red edible fruits, good hedging plant.	1-3m'
<b>Carissa haematocarpa</b>	Apocynaceae
Spreading, evergreen, thorny shrub with many heavily scented white flowers followed by red berries.	2m
<b>Carissa macrocarpa</b>	Apocynaceae
Amatungulu, Natal plum, Grootnoemnoem	
Attractive dense shrub, evergreen, white, scented flowers, red edible fruits, ideal for difficult coastal gardens, good hedging or barrier plant.	1 - 4 m
<b>Cassine maritima</b>	Celastraceae
A scrambling shrub from the Cape coastal dunes covered with white fruit for most of the year. A good plant for coastal gardens and to attract birds.	600-900mm

**Chrysanthemoides incana**

Asteraceae

Bietou

Rambling groundcover shrub, grey foliage with lovely butter-yellow daisy flowers, January to December, withstands hot dry conditions, usually found growing on steep northern slopes, good plant for coastal areas.

500 mm

**Chrysanthemoides monilifera**

Asteraceae

Brother berry, Bietou

Evergreen shrub, fast growing, yellow daisies in winter and spring, edible berries attract birds, wind resistant, sandy coastal gardens.

2 - 3 m

**Clerodendrum glabrum**

Verbenaceae

White cats whiskers, Bitterblaar

Shrub or small tree, leaves dark green, flowers white with reddish, pink or mauve stamens, in showy rounded heads, in spring to summer, fragrant, sow spring, hardy, drought tolerant.

5-10m

**Clerodendrum myricoides**

Verbenaceae

Small resin-leaf, Kleinhaarpuisblaar

Shrub or small tree with attractive blue and white flowers during summer, grows in rocky areas and open woodland.

7 m

**Clerodendrum ugandense**

Verbenaceae

A beautiful large shrub with striking blue flowers and attractive foliage.

1.5m

**Cliffortia ericifolia**

Rosaceae

A small fine-foliaged shrub suited to mixed fynbos plantings in lowland areas. This is a rare species from the Rondevlei Bird Sanctuary.

**Cliffortia graminea**

Rosaceae

Vleirooigras, Wilde-ertjie

Evergreen shrub with grass-like leaves, small inconspicuous flowers in summer, suitable for wet areas in full sun.

1 to 2 m

**Cliffortia obcordata**

Rosaceae

Large spreading shrub with attractive blue-green foliage. Ideal for coastal and fynbos gardens, can be clipped.

1 - 2 m

<b>Cliffortia odorata</b>	Rosaceae
A hardy evergreen groundcover with attractive oval green leaves spreading vigorously in full sun or light shade.	600mm
<b>Coddia rudis</b>	Rubiaceae
Small bone apple, Kleinbeenappel.	
White gardenia-like flowers in spring, good plant for screening and embankments, partial shade.	2 m
<b>Colpoon compressum</b>	Santalaceae
Cape sumach, Pruimbos	
Dense shrub or small tree, blue-green leaves, evergreen, shiny red and black edible fruits, attracts birds, recommended for seaside planting.	3-5 m
<b>Crotalaria capensis</b>	Fabaceae
Cape rattle-pod, Kaapse klapperpeul	
A much branched shrub or small tree, leaves fresh green, flowers bright yellow, pea-shaped in showy pendulous sprays during summer, sow autumn or spring, a useful hedge plant, quick growing.	3-5m
<b>Cyclopia maculata</b>	Fabaceae
Heuningtee.	
Evergreen, upright shrub with yellow sweetly scented flowers, suitable for fynbos gardens.	1 m
<b>Diospyros austro-africana</b>	Ebenaceae
Fire-sticks, Kritikom	
Much-branched shrub, hairy grey leaves, red to black edible berries, hardy.	2-3m
<b>Diospyros dichrophylla</b>	Ebenaceae
Poison peach, Tolbos	
Shrub or small densely leaved tree; leaves glossy dark green; flowers creamy white, during summer; fruit a densely golden velvety berry in winter; sow autumn or spring.	2-13m
<b>Diospyros glabra</b>	Ebenaceae
Blueberry bush, Bloubessiebos	
A neat compact rounded shrub, with small yellow flowers, followed by blue-purple berries, good specimen plant, hedge plant or for use in a fynbos garden.	2-3m

<b>Diospyros lycioides</b>	Ebenaceae
Karoo bluebush, Karoobloubos	
Shrub or tree, evergreen creamy-white flowers, sweetly scented, pendulous, spring, brownish-red fruit summer to autumn, good screening plant.	3 - 7m
<b>Diospyros lycioides subsp. guerkei</b>	Ebenaceae
Sage-leaved bluebush, Salieblaarbloubos	
Shrub or small dense spreading tree, evergreen, bright green glossy leaves, berries edible, attracts birds, recommended.	2-3 m
<b>Diospyros lycioides subsp. lycioides</b>	Ebenaceae
Karoo blue-bush, Karoobloubos	
Evergreen, shrub or multi-stemmed small tree, dense crown, bluish green leaves, scented cream-yellow flowers, good nectar source, suitable for arid regions.	2-3m
<b>Diospyros pallens</b>	Ebenaceae
Bloubos	
Spreading shrub, white flowers, suitable for coastal gardens.	1 - 2.5 m
<b>Diospyros scabrida</b>	Ebenaceae
Compact, glossy-leaved shrub, distinctive seed, attracts birds, suitable for containers and small gardens.	3 m
<b>Diospyros simii</b>	Ebenaceae
Star apple, Ranktolbos	
Large shrub or small tree, flowers creamy-white, fragrant, fleshy berry covered with golden hairs, sow spring or autumn, good screening plant.	2 - 5 m
<b>Diospyros villosa</b>	Ebenaceae
Hairy star apple, Harige ranktolbos	
Scrambling shrub occasionally a small tree, lower leaf surfaces with pale whitish to rusty-red woolly hairs, flowers pale yellow fragrant in autumn, fruit fleshy covered with yellow bristly hairs, winter, suitable for subtropical frost free gardens.	2-4m
<b>Dodonaea angustifolia</b>	Sapindaceae
Sand olive, Sandolien	
Shrub or small tree, leaves shiny light green, attractive greenish-red winged seeds in winter, suitable for hedges, will thrive under most growing conditions, may encroach if not controlled.	3-5m

<b>Dombeya autumnalis</b>	Sterculiaceae
Autumn dombeya, Rotsdrolpeer	
Shrub or small tree, flowers white, rarely pink in heads, closely resembles <i>Dombeya rotundifolia</i> but flowers are smaller and appear late summer-autumn among the leaves.	3-5m
<b>Dombeya burgessiae</b>	Sterculiaceae
Pink wild pear, Persdrolpeer	
Large bushy shrub, large soft-textured leaves, clusters of rose-pink flowers in autumn and winter, quick growing, recommended for frost-free gardens, sow spring.	3-5m
<b>Dombeya pulchra</b>	Sterculiaceae
Silver wild pear, Blombos	
Shrub or small tree, attractive white flowers, sometimes with deep rose centre, summer, sow in spring.	5-7m
<b>Dombeya tiliacea</b>	Sterculiaceae
Forest wild pear, Bosdrolpeer	
Deciduous shrub or small tree, leaves heart-shaped, 3-4m clusters of white flowers in late summer, frost-tender.	
<b>Dovyalis caffra</b>	Flacourtiaceae
Kei-apple, Kei-appel	
Shrub or small tree, evergreen, branches armed with stout spines up to 60 mm long; edible fleshy apricot-coloured fruits in summer, a good thorny hedge, hardy, sow spring.	3-5m
<b>Dovyalis rhamnoides</b>	Flacourtiaceae
Common dovyalis, Gewone suurbessie	
Shrub or small tree, light grey bark, straight spines up to 80 mm long, inconspicuous greenish-white flowers winter-spring, fleshy bright red fruits in late summer, sow spring.	2-7m
<b>Dracaena aletriformis</b>	Dracaenaceae
An erect ornamental shrub with a spindly stem and a rosette of long strap-like leaves and sweetly scented white flowers. Good container plant, light shade.	
<b>Duvernoia aconitiflora</b>	Acanthaceae
Lemon pistol bush	
A lovely subtropical shrub with glossy light-green leaves and small attractive cream flowers. Full sun to light-shade. Unusual species, new to horticulture.	2 m

<b>Duvernoia adhatodoides</b>	Acanthaceae
Pistol bush, Pistolbos	
Large shrub or small tree, evergreen, attractive shiny dark green foliage, showy white flowers with purple markings in the throat, summer, sow spring, frost-tender.	3-7m
<b>Dyschoriste rogersii</b>	Acnathaceae
Open small shrub with trumpet-shaped blue flowers in spring and summer. Tolerates drought and frost. Enjoys full sun and good rich soil.	600 mm
<b>Ehretia rigida</b>	Boraginaceae
Pistol bush, Pistolbos	
Rigid twiggy shrub or small tree, arching drooping branches, fragrant lilac flowers in spring - summer, edible orange-red berries in summer, fast growing, drought tolerant and hardy, recommended for arid areas.	2-5m
<b>Elytropappus rhinocerotis</b>	Asteraceae
Renosterbos	
Fine grey foliage, pioneer plant in disturbed areas, suitable for coastal conditions.	1 m
<b>Eriocephalus africanus</b>	Asteraceae
Wild rosemary, Kapokbossie, Wilderoosmaryn.	
A hardy drought resistant shrub with fine grey- textured aromatic foliage, use like rosemary, white flowers in autumn, wind-resistant, suitable for coastal gardens.	1 m
<b>Eriocephalus ericoides</b>	Asteraceae
Gewone kapokbossie	
Shrub, minute leaves, flowers white with reddish centre, winter to spring, sow autumn.	0.5 - 1 m
<b>Eriocephalus racemosus</b>	Asteraceae
Wild rosemary, Kapokbos	
Bushy, white flowers and woolly seeds.	1 m
<b>Erythrina zeyheri</b>	Fabaceae
Ploegbreker	
Dwarf deciduous shrublet, large tuberous rootstock, aerial stems very short, annual, short sharp recurved prickles, very large trifoliolate leaves, recurved prickles on the veins, inflorescence of tubular red flowers in spring, sow spring.	1m

<b>Euryops abrotanifolius</b>	Asteraceae
Geelmagriet	
Erect shrub, yellow daisy flowers in autumn-summer, sow in autumn.	1m
<b>Euryops annae</b>	Asteraceae
Yellow flowering shrub, attractive fine foliage, dry sunny situation.	1 m
<b>Euryops chrysanthemoides</b>	Asteraceae
Shrub; grey foliage; yellow daisy flowers in spring.	1m
<b>Euryops chrysanthemoides x E. pectinatus</b>	Asteraceae
Rounded shrub with attractive grey foliage and yellow daisy flowers, spring flowering.	1 m
<b>Euryops linearis</b>	Asteraceae
Harpuisbos	
Erect shrub, yellow flowers in spring, mainly limestone areas, sow in autumn.	2m
<b>Euryops pectinatus subsp. pectinatus</b>	Asteraceae
Shrub, grey leaves, yellow flowers, quick-growing.	1.5 m
<b>Euryops speciosissimus</b>	Asteraceae
Clanwilliam euryops, Harpuisbos	
Tall shrub, upright habit, large yellow daisies in winter-summer, grows in arid areas in winter rainfall areas of western Cape, sow autumn.	1.6-2m
<b>Euryops tysonii</b>	Asteraceae
Compact yellow flowered shrub, frost resistant and suitable for cold gardens.	1m
<b>Euryops virgineus</b>	Asteraceae
Honey euryops, Rivierharpuisbos	
Attractive shrub with rounded shape, evergreen, masses of yellow flowers in winter and spring, suitable for small gardens.	0.5-3m
<b>Freylinia densiflora</b>	Scrophulariaceae
Floriferous shrub, hardy and suitable for coastal gardens.	2 m
<b>Freylinia lanceolata</b>	Scrophulariaceae
Honey-bell bush, Heuningklokkiesbos.	
A tall, erect shrub with slender branches, weeping at the	4 m

tips. Long, thin leaves and bunches of yellow tubular flowers that attract birds. Grows well under normal sunny garden conditions, but even better in wet conditions such as along streams.

<b>Freylinia longiflora</b>	Scrophulariaceae
A branched, drought resistant shrub with simple leathery leaves and trusses of white flowers on the branch tips. Suited to fynbos gardens. Plants respond well to pruning.	800mm
<b>Freylinia tropica</b>	Scrophulariaceae
Erect, evergreen shrub, white or blue flowers.	3 m
<b>Freylinia undulata</b>	Scrophulariaceae
Erect shrub, flowers bellshaped and purple, spring-flowering, grows in clayey lower slopes.	1 - 2 m
<b>Freylinia visseri</b>	Scrophulariaceae
Multi-stemmed shrub for difficult, sandy coastal gardens, red-purple flowers, extinct in nature.	
<b>Garcinia gerrardii</b>	Clusiaceae
Forest garcinia, Bosgeelmelkhout	
Large shrub or small tree, leaves leathery shiny green, flowers white or cream in terminal heads in mid summer, fruit berry-like, yellow when mature in autumn. Suitable for shady subtropical frost-free gardens, water regularly in summer.	4-5m
<b>Gardenia cornuta</b>	Rubiaceae
Natal gardenia, Natalkatjiepieping	
Large rounded shrub, evergreen, densely branched, glossy foliage, showy fragrant white flowers in early summer, attractive orange-yellow fruits, tender, young plants are slow-growing; recommended.	2 - 5 m
<b>Gardenia thunbergia</b>	Rubiaceae
White gardenia, Witkatjiepieping	
Large shrub or small tree, branchlets short and rigid, bark smooth pale grey, glossy foliage, showy creamy-white flowers in summer, fruits greyish-green remain on the bushes all year round, slow-growing, an attractive garden subject, sow spring.	2 -5 m
<b>Gardenia volkensii</b>	Rubiaceae
Transvaal gardenia, Transvaalkatjiepieping	

Large shrub or small tree, much branched, angular growth habit, bark smooth pale grey, branchlets at right angles to the branches, leaves glossy dark green, striking white flowers aging to yellow, sweetly scented, summer, grey green fruits.	3-7m
<b>Gnidia juniperifolia 'Yellow Stars'</b> A small fynbos shrublet with small light green leaves and clusters of yellow star-like flowers at the tips of the branches. Flowers are produced all year round with peak flowering in spring.	Thymelaeaceae 500 mm
<b>Gnidia squarrosa</b> Much branched shrub, attractive green-yellow flowers with a pink flush from winter to spring, night scented, full sun, well-drained medium.	Thymelaeaceae 1 m
<b>Gomphostigma virgatum</b> Otter bush, Otterbossie Fast-growing, evergreen shrub with flexible branches bearing masses of white flowers all summer. Needs plenty of water - excellent alongside a pond. Prune back in late winter. Full sun. Hardy.	Loganiaceae 2 m
<b>Grewia caffra</b> Climbing raisin, Rankrosyntjie Scrambling many-stemmed shrub; starry yellow flowers in summer; edible yellow-brown fruits in autumn.	Tiliaceae 2-4m
<b>Grewia flavescens var. flavescens</b> Rough leaved raisin, Skuweblaarrosyntjie Large scrambling shrub, light-green hairy leaves, yellow flowers, shiny yellowish-brown berries, full sun, hardy plant.	Tiliaceae 1-5m
<b>Grewia hispida</b> Small shrub, flowers mauve, November, occasional.	Tiliaceae
<b>Grewia occidentalis</b> Four-corners, Kruisbessie Scrambling shrub or small tree, evergreen, drooping branches, mauve flowers, 4-lobed reddish brown berries in late summer, attract birds, hardy.	Tiliaceae 4 m
<b>Grewia retinervis</b> Kalahari sandraisin, Basterskurwerosyntjie A spreading shrub. Bright yellow flowers in October to	Tiliaceae 4 m

March, followed by edible orange to red fruits from February to May. Fruit attracts birds. Plant in full sun in compost enriched soil.

### **Grewia robusta**

Tiliaceae

Karoo cross berry, Karookruisbessie

Dense rounded shrub or small tree, grey bark, branchlets often spiny, attractive pink or purple flowers, sweetly scented, spring to summer, deeply 4-lobed reddish-brown fruits in winter, easily cultivated.

2-4 m

### **Greyia flanaganii**

Greyiaceae

Kei bottlebrush, Keibaakhout

Shrub, or small tree, almost circular leaves crowded at ends of branches, showy red bell-shaped flowers in loose few-flowered heads pointing downwards in autumn-spring, sow spring.

3m

### **Greyia radlkoferi**

Greyiaceae

Transvaal bottlebrush, Transvaalse baakhout

Shrub, rarely a small tree; large almost circular leaves, showy scarlet-red bell-shaped flowers in loose heads pointing downwards in autumn-spring; sow spring, decorative garden subject.

2-4m

### **Greyia sutherlandii**

Greyiaceae

Natal bottelbrush, Nataalse baakhout

Shrub or small tree, bark reddish-grey, leaves rounded scalloped, showy red bell-shaped flowers in dense racemes in spring, sow spring, decorative garden subject.

3-7m

### **Halleria elliptica**

Scrophulariaceae

Dark green, erect shrub, red tubular flowers.

2 - 3 m

### **Hemizygia rehmannii x obermeyerae 'Kirstenbosch'**

Lamiaceae

A desirable hybrid of 2 floriferous species, provides colour in autumn and late summer when little else is in flower.

1m

### **Heterolepis aliena**

Asteraceae

Daisy bush, Madelifiebos

Sprawling leafy shrub, evergreen, large golden yellow daisies in summer, hardy, drought tolerant, sow autumn.

200-600mm

### **Hibiscus diversifolius**

Malvaceae

Black-eyed Susan hibiscus

Shrub, often scrambling or a small tree, leaves almost

3-4m

circular, lobed with toothed margins, flowers yellow with blue-black centre, up to 80 mm long, in spring, prefers damp situation.	
<b>Hibiscus ludwigii</b>	Malvaceae
Wild hibiscus, Wildestokroos	
Rambling shrub; flowers yellow often with dark centres, in summer; free flowering, suitable for embankments and verges.	2-3m
<b>Hibiscus pedunculatus</b>	Malvaceae
Wild hibiscus, Wildestokroos	
Shrubby perennial; pink flowers during summer; attractive garden subject, suitable for subtropical gardens, keep watered during summer.	1m
<b>Hibiscus tiliaceus</b>	Malvaceae
Coast hibiscus, Wildekatoenboom	
Stout shrub or small tree; broad almost circular leaves; large showy yellow flowers in summer.	3-6 m
<b>Hyaenanche globosa</b>	Euphorbiaceae
Hyaena poison, Wolwegifboom	
Dense shrub or small tree, leaves stiffly leathery dark green, small deep red flowers in clusters, mid-winter to spring; fruit and leaves highly toxic; suitable for rocky semi-arid conditions.	3-5m
<b>Hymenolepis parviflora</b>	Asteraceae
Coulter-bush	
Erect woody shrub; grey-green foliage; tiny yellow flowers in large showy heads in summer; sow in autumn.	1-3m
<b>Hypericum revolutum</b>	Clusiaceae
Curry bush, Kerriebos	
Shrub, often a pioneer to forest; fresh green foliage; bright yellow flowers in summer and autumn, a beautiful shrub for the garden; fast growing, adaptable in cultivation; gives off a distinct smell of curry.	1-3m
<b>Hypericum roeperianum</b>	Clusiaceae
Large-leaved hypericum, Grootblaarkerriebos	
Shrub or small tree; bright yellow flowers in summer and autumn; good garden shrub.	3-5m

<b>Hypericum roeperianum var. roeperianum</b>	Clusiaceae
Large-leaved curry bush, Grootblaar kerriebos	
Evergreen, hardy shrub with large attractive golden yellow flowers. Plant in full sun position.	3 m
<b>Hypocalyptus sophoroides</b>	Fabaceae
Robust shrub, magenta-pink flowers, in summer, sow autumn.	1-4m
<b>Indigofera frutescens</b>	Fabaceae
River indigo, Riviervervbos	
Graceful shrub, often scrambling, leaves compound dark green, fragrant pink 'pea' flowers in sprays in summer, small brown seed pods, an attractive garden plant in sun or semi shade.	4-7m
<b>Indigofera langebergensis</b>	Fabaceae
Shrub, rose pink to purple 'pea' flowers almost all year.	0.3-2m
<b>Indigofera lyalli</b>	Fabaceae
Venda indigo, Vendavervbos	
Rounded shrub, dark pink to red flowers in late summer, full sun, quick growing.	3m
<b>Indigofera natalensis</b>	Fabaceae
Forest indigo, Bosverfbos	
Usually a dainty shrub, occasionally a small tree, pale grey bark, attractive dark green shiny foliage, small white flowers in sprays in mid-summer to autumn, sow spring.	1 - 3 m
<b>Jasminum glaucum</b>	Oleaceae
Wild jasmine, Wildejasmyn	
Evergreen shrub, a western cape species of this popular plantgroup, showy sweet smelling white flowers in spring.	
<b>Jasminum multipartitum (rambler)</b>	Oleaceae
A scrambling shrubby form of this species with dark green leaves and large white flowers with a pink reverse. Summer flowering. Full sun to light shade.	
<b>Justicia campylostemon</b>	Acanthaceae
A shrub with white, cream or greenish flowers with maroon speckles in throat from November to April. Requires a warm shady position and rich soil.	2-3m

**Justicia petiolaris**

A small shrub to 1m with oval leaves and attractive pink-purple flowers in summer. Requires a warm position in light shade.

Acanthaceae  
800 mm

**Justicia petiolaris subsp. bowiei**

Herbaceous perennial with mauve flowers, suitable for shade gardens.

Acanthaceae

**Karomia speciosa forma speciosa**

Wild chinese hats

Much-branched shrub or shrubby tree, persistent mauve calyx, corolla blue.

Verbenaceae

**Kraussia floribunda**

Rhino-coffee, Wildekomoelie

Beautiful, evergreen shrub or small tree for sun or semi shade with glossy, dark green leaves. Bears scented white flowers in spring, followed by masses of black berries, which attract birds. Tender.

Rubiaceae

1-5 m

**Leucosidea sericea**

Ouhout

Greyish shrub or small much branched tree, leaves compound, margins jaggedly toothed; dense clusters of greenish flowers, fast growing, hardy, frost-tolerant, needs damp conditions.

Rosaceae

2-5m

**Lobostemon fruticosus**

Agt-daegenesbos

A neat medium sized bush, breathtakingly beautiful when in flower (spring and early summer), water regularly and plant in compost rich well drained soil in full sun.

Boraginaceae

0.8 - 1 m

**Lobostemon montanus**

Much-branched shrub, blue flowers in spring, sandy areas, sow in autumn.

Boraginaceae

1 -2 m

**Lycium ferocissimum**

Slangbessie

Evergreen shrub, flowers bell-shaped, cream and maroon, winter to spring, attractive red berries, good barrier plant, suitable for coastal gardens.

Solanaceae

2 m

**Mackaya bella**

Forest bell bush, Blouklökkiesbos

Acanthaceae

A tall, multi-stemmed shrub, with dark green leaves and beautiful trumpet-shaped pale blue flowers. Plant in enriched soil in shade. Responds well to pruning. Sow in spring.	2 - 3 m
<b>Maytenus bachmannii</b>	Celastraceae
Willow maytenus	
Shrub or small straggling tree, leaves narrow willow-like and apple-green, star-like creamy-white flowers in mid summer, showy pinkish-red seed capsules, good container plant, full sun or partial shade.	1-3m
<b>Maytenus heterophylla</b>	Celastraceae
Common spike-thorn, Gewone pendoring	
Shrub or small tree, sharp spines on branches, leaves in clusters, flowers whitish in heads, late summer - winter, fruit a semi-fleshy capsule, greenish-yellow to yellow tinged with red, good barrier plant and good under coastal conditions, sow spring.	4 -5 m
<b>Maytenus polyacantha</b>	Celastraceae
Kraal spike-thorn, Kraalpendoring	
Dense, thorny shrub, branches with strong stout spines, small white flowers in late summer, decorative reddish-brown capsules, good barrier plant, keep watered in summer.	2 - 4 m
<b>Maytenus procumbens</b>	Celastraceae
Dune koko tree, Duinekokoboom	
Bushy scrambling shrub or small tree, flowers creamy-white or greenish, June to July.	3-6m
<b>Melianthus comosus</b>	Melianthaceae
Karoo kruidjie-roer-my-niet	
A branched fast growing shrub with large divided strongly aromatic leaves and sprays of orange-red flowers. Attracts sunbirds to the garden. Suitable for coastal, fynbos and karoo gardens as well as hot mixed borders. Sow autumn or spring.	1.5m
<b>Melianthus major</b>	Melianthaceae
Kruidjie-roer-my-niet	
A branched fast growing shrub with large divided strongly aromatic leaves and elegant spikes of wine-red flowers. Attracts sunbirds to the garden. Suitable for coastal, fynbos and karoo gardens as well as hot mixed borders. Sow autumn or spring.	1.5m

<b>Metalasia muricata</b>	Asteraceae
Blombos	
Rounded shrub, white flowerheads in winter, ideal for sandy areas and fynbos gardens, sow autumn.	2 m
<b>Metalasia muricata 'Silver Shores'</b>	Asteraceae
A compact rounded shrub with silver-grey leaves. It is a fine textural plant and produces white papery flowers in winter. It grows well in a wide range of conditions in full sunlight. This plant is adapted to harsh coastal conditions.	1 m
<b>Metarungia longistrobis</b>	Acanthaceae
Branching shrub, neat shape, yellow flowers in summer.	1.5 m
<b>Metrosideros angustifolia</b>	Myrtaceae
Lance-leaf myrtle, Smalblaarmirt	
Shrub or small tree, leaves simple long and narrow, flowers white to pale yellow in many-flowered heads in summer.	2 - 4 m
<b>Monanthotaxis caffra</b>	Annonaceae
Dwababerry, Dwababessie	
Spreading shrub with yellowish-green flowers, February to March, red berries, suitable for warm subtropical gardens, sow summer.	
<b>Mundulea sericea</b>	Fabaceae
Kurkbos, Cork bush	
A slow-growing, attractive, large shrub or small tree. Bark is deeply furrowed and bears sprays of lilac pea-shaped flowers from October to January. Drought and frost resistant. Natural to Witwatersrand.	2-3 m
<b>Myrica cordifolia</b>	Myricaceae
Wasbessie.	
A rambling shrub with attractive bright green foliage, ideal for coastal gardens.	
<b>Myrica quercifolia</b>	Myricaceae
Maagpynbossie	
Shrub with lobed leaves, catkins yellowish in winter-spring, sow autumn.	1m
<b>Myrsine africana</b>	Myrsinaceae
Cape myrtle	
Neat rounded bushy shrub, small rounded shiny leaves,	2 m

pink flowers, decorative purplish berries, sow autumn or spring, semi-shade.

**Nebelia laevis**

Bruniaceae

An attractive compact shrub with clusters of ball-like flower heads, silver in bud and seed, and fluffy in white flowers, a fynbos filler species that will tolerate coastal conditions.

**Nesaea schinzii**

Lythraceae

A much-branching shrublet. Lots of little pink flowers in summer. Needs lots of water. Plant in well-drained soil.

**Nuxia congesta**

Loganiaceae

Wild elder, Broshout

Attractive evergreen shrub or tree, flowers creamy-white, with mauve tinges, autumn to winter, drought and frost tolerant, young plants slow growing, a good container plant.

2-8m

**Nylandtia spinosa**

Polygalaceae

Tortoise berry, Skilpadbessie

Thorny small-leaved shrub, lilac flowers, winter to spring, long-lasting orange berries, suitable for coastal gardens.

1 m

**Nymanianthus capensis**

Meliaceae

Chinese lanterns, Klapperbos

Erect or spreading shrub, attractive deep pink flowers, eclipsed by papery inflated balloon-like capsules, drought-resistant, cannot survive high rainfall.

2 m

**Ochna serrulata**

Ochnaceae

Mickey mouse bush

A bushy rounded shrub with small glossy green leaves. Yellow flowers in summer and long lasting ornamental red seed capsules. Attracts birds. Full sun to shade. Always looks good even when only in leaf.

1.5 m

**Oedera imbricata**

Asteraceae

A stiff compact small shrub, covered in yellow daisy type flowers late winter. A good plant for coastal gardens.

<b>Oldenburgia grandis</b>	Asteraceae
Suurberg cushion bush, Suurberg kussingbos	
Bushy shrub or small gnarled tree, large stiff leathery glossy dark green leaves in rosettes at the end of branches, giant purple thistleform flowers, hardy, good accent plant, seed is difficult to germinate.	2-3m
<b>Oldenburgia paradoxa</b>	Asteraceae
An unusual shrublet growing at high altitude in Cape mountains. It produces a tight rosettes of wooly leaves around a hard woody base forming a half football rooted into crevices in the rock. The daisy-like flowers are flush with the surface of the ball.	
<b>Olea exasperata</b>	Oleaceae
Coast olive, Duine-olienhout	
Dense multi-stemmed shrub or small tree, leaves oblong leathery, white flowers small in terminal heads, fruit an edible black berry turning purplish when mature, attracts birds, suitable for coastal gardens.	2-5m
<b>Oncoba spinosa</b>	Flacourtiaceae
Fried-egg flower, Snuifkalbassie	
Large spiny shrub or small tree, straight spines, glossy dark green leaves, flowers white with central mass of golden stamens in spring-summer, fragrant, very showy, decorative reddish-brown fruits in autumn-winter, slow growing, a good barrier plant	3-5m
<b>Ormocarpum trichocarpum</b>	Fabaceae
Caterpillar bush	
Shrub for hot dry areas with purple flowers and curious caterpillar-like hairy pods. Full sun. Drought hardy. Semi-frost hardy. Good for areas with shallow soil.	2 m
<b>Otholobium fruticans</b>	Fabaceae
Skaapbostee, Swawelbos	
Spreading evergreen shrub, blue pea-flowers, suitable for coastal gardens in winter rainfall area, sow autumn.	1 m
<b>Otholobium striatum</b>	Fabaceae
Shrub or medium sized tree, creamy-yellow pea-flowers during winter, sow autumn.	4 m
<b>Othonna coronopifolia</b>	Asteraceae
Shrub, yellow daisies in winter and spring, sandy areas.	1 - 2 m

<b>Oxyanthus latifolius</b>	Rubiaceae
A large forest understorey sub-tropical shrub with large glossy, dark green loquat-like leaves. Clusters of white flowers are followed by large yellow-red fruits. Suitable for warm sheltered gardens and attractive all through the year.	
<b>Oxyanthus pyriformis</b>	Rubiaceae
Natal loquat	
A large forest understorey shrub with large, glossy, dark-green, loquat-like leaves. The clusters of white flowers are followed by large, soft, yellow-red fruits. Suitable for a warm, sheltered gardens.	7m
<b>Oxyanthus speciosus subsp. gerrardii</b>	Rubiaceae
Wild loquat	
A shrub or rather slender tree, attractive shade plant, sweet smelling white flowers in summer, fruit yellow.	2 m
<b>Parkinsonia africana</b>	Fabaceae
Wildgreen-hair tree, Wildegroenhaarboom	
Tall shrub or small tree, bark smooth, brown or grey, clusters of attractive yellow flowers, spring, leaves minute and widely spaced, hardy and drought resistant.	3 - 4 m
<b>Passerina vulgaris</b>	Thymelaeaceae
Evergreen shrub, reddish flowers in spring, sow autumn.	3 m
<b>Pavetta cooperi</b>	Rubiaceae
Brides bush, Bruidsbos.	
Attractive, dense, evergreen shrub, scented white flowers in summer, tender.	800 mm
<b>Pavetta gardeniifolia</b>	Rubiaceae
Very attractive large spreading shrub, partly shady, attractive snow-white flowers, mid-summer, for warm frost-free sites, water freely in summer.	4m
<b>Pavetta lanceolata</b>	Rubiaceae
Forest brides bush, Bosbruidsbos	
Shrub or small tree, evergreen, leaves dark green, clusters of fragrant white flowers in summer, very ornamental.	3-7m
<b>Pavetta revoluta</b>	Rubiaceae
A robust shrub with rich green oval leaves. It produces very attractive clusters of white flowers in mid-summer.	4 m

An adaptable plant that can be place in full sun or light shade. Also suitable for containers.	
<b>Pavetta zeyheri</b>	Rubiaceae
Small leaved brides bush, Fynblaarbruidsbos	
Evergreen shrub, leaves leathery dark green, white flowers in spring, attractive, tender.	1.5 m
<b>Pavonia columella</b>	Malvaceae
Shrub on forest margins, pale pink flowers in winter.	
<b>Pavonia praemosa</b>	Malvaceae
Shrub, purplish stems, shiny leathery leaves, yellow flowers, summer, sow autumn or spring.	2 - 3 m
<b>Penaea mucronata</b>	Penaeaceae
A small upright shrub with attractive regimented foliage and flower heads. This plant belongs to one of the special fynbos endemic families and is a must in any fynbos garden.	
<b>Phaenocoma prolifera</b>	Asteraceae
Rooisewijaartjie, Everlasting	
Densely branched granular-leafed shrub, pink to red everlasting daisy flowers, sow autumn.	300-600mm
<b>Phylica axillaris</b>	Rhamnaceae
Much branched variable shrub, whitish flowers all year, sow autumn, grow in full sun.	250 - 800 mm
<b>Phylica buxifolia</b>	Rhamnaceae
Box hard-leaf, Bukshardeblaar	
Compact rounded evergreen shrub or small tree, very wind-resistant, tidy foliage, dense clusters of flowers in early winter.	3 m
<b>Phylica ericoides</b>	Rhamnaceae
Ericoid shrub, dense white flowers, sandy areas.	900mm
<b>Phylica oleaefolia</b>	Rhamnaceae
Blinkhardebos	
Rigid shrub with broad, white-backed leaves, flowers cream, autumn, occurs on rocky slopes, drought resistant.	1.5 - 2 m
<b>Phylica paniculata</b>	Rhamnaceae
Hardebos, Luisboom	
Evergreen shrub or tree, white flowers in winter, full sun.	2-6m

<b>Phylica pinea</b>	Rhamnaceae
Shrub with fairly broad white-backed leaves, white flowers in autumn.	1 m
<b>Phylica plumosa</b>	Rhamnaceae
Veerkoppie	
Attractive evergreen shrub, feathery golden bracts, yellowish flowers in spring, good cut and dried flower, sow autumn.	300 mm
<b>Phylica pubescens</b>	Rhamnaceae
Featherhead, Veerkoppie	
Attractive evergreen shrub, feathery foliage, white flowers in plumose racemes, spring, good cut and dried flower, sow autumn.	1 - 1.5 m
<b>Phylica purpurea</b>	Rhamnaceae
Dense shrub or tree, needle-like foliage, dense white flowers in compact heads, good texture plant, ideal for fynbos gardens.	3m
<b>Phylica stipularis</b>	Rhamnaceae
Rigid shrub, tiny leaves, white flowers in heads, late winter to spring, sow in autumn.	1m
<b>Phymaspermum acerosum</b>	Asteraceae
Erect straggly shrub, finely divided leaves, large yellow flowerheads (200 - 250 mm diameter), autumn.	1 - 1.5 m
<b>Plumbago auriculata</b>	Plumbaginaceae
Attractive, evergreen shrub with blue or white flowers, rambling, suitable for covering banks, full sun.	2 m
<b>Podalyria calyptrata</b>	Fabaceae
Sweetpea bush, Keurtjie, Ertjiebos	
Evergreen, grey-green foliage, lilac sweetpea-like flowers in spring, scented, easy and fast-growing, recommended, sow autumn or spring.	3 m
<b>Podalyria canescens</b>	Fabaceae
Keurtjie	
Shrub, silvery foliage, pink sweetpea-like flowers, good subject for planting in fynbos garden.	0.6 - 1 m

<b>Podalyria sericea</b>	Fabaceae
A small silvery shrub, with pink flowers in spring. Requires a sunny well drained position. Sow autumn.	1 m
<b>Polygala myrtifolia</b>	Polygalaceae
September bush, Septemberbossie. Attractive evergreen shrub, purple, magenta or occasionally white flowers, all year round.	2 m
<b>Polygala virgata</b>	Polygalaceae
Grey leaves, purple flowers in spring.	1.5 m
<b>Priestleya laevigata</b>	Fabaceae
Stout shrub, yellow 'pea' flowers in spring, sow autumn.	1 - 2 m
<b>Psoralea pinnata</b>	Fabaceae
Fountain bush, Bloukeur Shrub or small erect tree, delicate aromatic leaves, clusters of blue flowers in spring, moist conditions.	4 m
<b>Psychotria capensis</b>	Rubiaceae
Lemon bush, Lemoenbos Shrub or small tree, glossy leaves, cream to yellow flowers, red berries in decorative clusters in winter, attracts birds, shade, frost-tender, sow spring.	3 m
<b>Pteronia camphorata</b>	Asteraceae
Erect evergreen shrub with needle-shaped foliage, bright yellow flowers in spring and summer, hardy.	1 m
<b>Pteronia uncinata</b>	Asteraceae
Shrub, yellow flowers, small grey leaves.	300 - 900mm
<b>Putterlickia pyracantha</b>	Celastraceae
False spike thorn, Basterpendoring A fast-growing, dense, spreading shrub. White flowers carried in bunches in midsummer. Forms a dense hedge when pruned. Add compost to soil for better results. Drought and frost hardy. Full sun.	2 m
<b>Rhamnus prinoides</b>	Rhamnaceae
Dogwood, Blinkblaar Bushy shrub or small tree, evergreen, very glossy dark green leaves, small greenish flowers, shiny red-black edible berries in late summer, hardy, recommended garden subject, sow spring.	5-7m

<b>Rhigozum obovatum</b>	Bignoniaceae
Karoo rhigozum, Geelberggranaat	
Shrub or small twiggy tree, reduced leaves, bright yellow flowers in spring, showy in dry regions, hardy.	2 - 3 m
<b>Rhus</b>	Anacardiaceae
<i>Rhus</i> have a pleasant, smooth, evergreen foliage and are generally frost-hardy and drought tolerant. The female plants have tiny bunches of currant-sized, red or yellow berries which are sometimes used for flower arrangements. All the species have leaves divided into 3 leaflets springing from the end of a short leaf stalk. They do best in a sunny or partially shaded position and well-drained soil which should contain compost. They grow easily from seed sown in spring or autumn, according to the rainfall area in which they are found.	
<b>Rhus angustifolia</b>	Anacardiaceae
Lance-leaf taaibos, Smaiblad	
Usually a shrub, occasionally a small tree, small yellowish flowers in heads, in early summer, sow in autumn.	2-4m
<b>Rhus batophylla</b>	Anacardiaceae
Shrublet, branching freely from the base, glabrous trifoliate leaves, attractive red fruit, drought-tolerant.	1 - 1.5 m
<b>Rhus ciliata</b>	Anacardiaceae
Shrub, small yellowish-green flowers, frost tolerant, suitable for highveld and semi-arid gardens.	1m
<b>Rhus crenata</b>	Anacardiaceae
Dune crowberry, Duine-kraaibessie	
Compact branched shrub, evergreen, highly wind-resistant, suitable for coastal gardens,	3m
<b>Rhus dentata</b>	Anacardiaceae
Nana-berry, Nanabessie	
Shrub or small tree, small yellow flowerheads in spring, clusters shiny red berries, summer, attractive garden subject, sow autumn or spring.	2-6m
<b>Rhus discolor</b>	Anacardiaceae
Sparsely branched shrublet, underground rootstock, leaves with white felted under surface, flowers small in dense heads in spring to summer.	500mm

<b>Rhus erosa</b>	Anacardiaceae
Broom karee, Besemkaree	
Sprawling shrub or small tree, long narrow strikingly toothed tri-foliolate leaves, flowers in summer, fruits summer-autumn, useful hedge plant, sow spring or autumn.	3-4m
<b>Rhus glauca</b>	Anacardiaceae
Usually a shrub, rarely a small tree, evergreen, glossy leaves, shiny brown berries in spring, attracts birds, recommended for coastal gardens.	2-8m
<b>Rhus gueinzii</b>	Anacardiaceae
Thorny karee, Doringkaree	
Shrub or small tree, branches bearing spines, rough brown bark, shiny brown berries in late summer, sow spring.	3-4m
<b>Rhus incisa var. effusa</b>	Anacardiaceae
Rub-rub berry	
A large shrub with small dark-green oak-like leaves that are woolly-white below. The small greenish-yellow flowers are borne in large woolly heads that form bunches of shaggy pinkish-brown fruit in summer.	1 - 4m
<b>Rhus laevigata</b>	Anacardiaceae
Dune taaibos, Duinetaaibos	
Dense shrub or small bushy tree, yellow-green flowers in autumn followed by russet-red berries, sow autumn.	0.5-3 m
<b>Rhus lucida</b>	Anacardiaceae
Glossy taaibos, Blinktaaibos	
Shrub or small tree, dark green glossy leaves, creamy-white flowers in heads, in spring, shiny brown fruit, sow autumn or spring, suitable for coastal gardens.	3-4m
<b>Rhus nebulosa</b>	Anacardiaceae
Climber, scrambling shrub or small tree, trifoliolate leaflets, small yellow flowers in late summer, red-brown berries in dense clusters, sow in spring.	1-3m
<b>Rhus pallens</b>	Anacardiaceae
Common crowberry	
Multi-stemmed shrub or small tree with lush foliage. Mostly evergreen. Bears fruits which attract birds. Full sun or semi-shade. Moderate water. Tolerates severe frost. Good for screening.	3-5 m

<b>Rhus pyroides</b>	Anacardiaceae
Common taaibos, Gewone taaibos	
Shrub or small bushy spreading tree, a variable species, frequently spiny, flowers small yellow in heads followed by red berries in late summer.	2-5m
<b>Rhus refracta</b>	Anacardiaceae
A much branched, spiky shrub with white flowers. Suitable for a hot dry position.	2-3m
<b>Rhus tomentosa</b>	Anacardiaceae
Furry rhus, Korentebos	
Shrub or small tree, tri-foliolate leaves with hairy undersurface, small furry flowers in conspicuous heads in winter, greyish furry berries, sow autumn or spring.	2-5m
<b>Rhus transvaalensis</b>	Anacardiaceae
Transvaal taaibos, Transvaaltaaibos	
Shrub or small well-branched tree; leaves leathery; flowers very small, greyish yellow-green in sparse heads followed by deep orange to reddish-brown berries in clusters in mid summer.	3-5m
<b>Rhus undulata</b>	Anacardiaceae
Kuni-bush, Koeniebos	
A variable species, low growing shrub, occasionally a small tree, adaptable, small flowers in late summer, <b>reddish green fruits in autumn-winter.</b>	2-5m
<b>Rhus zeyheri</b>	Anacardiaceae
Blue currant, Bloutaaibos	
A small tree with small, blue-green, trifoliolate leaves with a whitish bloom. Small, yellow-green flowers are followed by bunches of attractive, russet-red fruit in late summer.	4m
<b>Ruspolia hypocrateriformis</b>	Acanthaceae
Very attractive shrub, red flowers in summer, suitable for warm, dry gardens.	1 - 2 m
<b>Ruttya ovata</b>	Acanthaceae
Upright shrub, white spotted flowers in spring. Prune hard in winter to ensure a compact growth habit.	4m
<b>Ruttyruspolia</b>	Acanthaceae
Attractive erect shrub with pink flowers during summer, good garden plant.	1.5 m

<b>Salvia africana-caerulea</b>	Lamiaceae
Bloublomsalie	
A hardy aromatic shrub with blue and white flowers in summer. Suitable for hot, sunny low maintenance areas. Sow autumn or spring.	2 m
<b>Salvia africana-lutea</b>	Lamiaceae
Golden salvia, Bruinsalie	
Aromatic much branched shrub, grey leaves, brownish flowers in autumn, dry slopes and coastal areas.	2 m
<b>Salvia chamelaeagnea</b>	Lamiaceae
Afrikaansesalie, Bloublommetjiesalie	
Shrub, flowers blue or white in summer, south western Cape.	2 m
<b>Salvia dentata</b>	Lamiaceae
Fine grey foliage, clear blue flowers in spring, sunny situation.	1 m
<b>Salvia disermas</b>	Lamiaceae
Grootblousalie	
Shrubby perennial with woody base, white to pale mauve flowers in summer, sow in autumn, drought tolerant.	1.2 m
<b>Salvia dolomitica</b>	Lamiaceae
Attractive spreading shrub. Grey foliage, flowers an attractive pale lilac.	1 - 1.5 m
<b>Salvia lanceolata</b>	Lamiaceae
An upright grey leaved shrub, yellow to burnt-red flowers with attractive fruits, sunny situation.	750mm
<b>Salvia muiirii</b>	Lamiaceae
A small aromatic shrub with beautiful blue and white flowers. Full sun.	500 mm
<b>Salvia repens</b>	Lamiaceae
Kruipsalie	
Shrubby perennial with creeping woody rhizome, blue to white flowers in summer, sow autumn or spring.	700 mm
<b>Salvia rugosa (SYN = S. disermas)</b>	Lamiaceae
Transvaal sage, Wild giant sage	
A perennial herb, with blue, mauve or white flowers from November to April. Aromatic leaves. Plants have medicinal value. Prune back in late winter.	600 mm

<b>Salvia runcinata</b>	Lamiaceae
Hardesalie	
An erect perennial with a creeping woody rhizome that results in a multi-stemmed habit. The white to blue to lilac flowers are borne in summer.	500mm
<b>Sclerochiton harveyanus</b>	Acanthaceae
An attractive much branched shrub with small dark green leaves on thin branches. It is suitable for shady positions or indoors in containers. Numerous small blue flowers are produced in the summer months.	600 mm
<b>Scutia myrtina</b>	Rhamnaceae
Cat thorn, Droog-my-keel	
Spreading scrambling thorny shrub, suitable as a hedge, glossy foliage, sun or shade, flowers yellow, fruits purple, late summer, sow summer.	
<b>Senecio rosmarinifolius</b>	Asteraceae
Much branched shrublet, yellow flowers in summer, sow autumn.	600 mm
<b>Sparrmannia africana</b>	Tiliaceae
Cape stock-rose	
Large spreading shrub or small tree, showy white flowers in spring, sow autumn or spring, grow in full sun or semi-shade.	4-6m
<b>Sparrmannia ricinocarpa</b>	Tiliaceae
A shrub with white flowers in June-Nov. Plants grow easily and quickly. Frost hardy. Plant in full sun, well-drained, compost-enriched soil.	2 m
<b>Stoebe alopecuroides</b>	Asteraceae
Katstertbos	
Robust shrub, pungent leaves, flowers white, in dense spikes, in winter to summer, sow autumn.	1.5 m
<b>Stoebe muirii</b>	Asteraceae
Compact shrub with small grey leaves, pink flowers in autumn, full sun and well-drained medium, sow autumn.	600 mm
<b>Stoebe plumosa</b>	Asteraceae
Slangbos	
Grey evergreen shrub, granular leaves, flowers dark 0.3 - purple or brown, late summer, sow autumn, good groundcover and dried floral material.	1.2 m

<b>Strelitzia juncea</b>	Strelitziaceae
Rush leaved Strelitzia	
Similar to <i>Strelitzia reginae</i> with same blue and orange flowers, but has partly cylindrical leaves, very decorative, good form plant, sow spring, well-drained, rich soil in full sun.	1m
<b>Strelitzia reginae</b>	Strelitziaceae
Bird of paradise, Kraanvoëlblom	
Orange and blue flowers, sow spring or early summer, a striking feature plant and an excellent cut flower.	1-3m
<b>Strelitzia reginae 'Mandela's Gold'</b>	Strelitziaceae
Golden yellow and deep purple 'Crane flowers', in autumn-winter-spring. Full sun or semi shade, wind tolerant, suitable for coastal gardens, plant against a north-or-west facing wall in frosty areas. Striking feature plant.	2m
<b>Strophanthus speciosus</b>	Apocynaceae
Common poison rope, Gewone giftou	
Rambling evergreen shrub or climber, curious yellow and red flowers in summer, poisonous, tender, sow spring.	1-2m
<b>Struthiola dodecandra</b>	Thymelaeaceae
Attractive shrub to 600mm, white flowers in winter and summer, full sun.	
<i>Sutherlandia frutescens</i>	Fabaceae
<b>Kankerbos</b>	
Grey leaves, scarlet pea-flowers in summer, large inflated seed pods, sow autumn or spring, easy to grow, hardy, recommended.	1.5 m
<b>Syncolostemon 'Purple punch'</b>	Lamiaceae
A hardy, much branched, woody shrub. It has small oval aromatic leaves and dense heads of bright purple-pink flowers in late summer. Heavy pruning in mid winter is required and is followed by vigorous active growth in summer.	1.5 m
<b>Syncolostemon rotundifolius x densiflorus</b>	Lamiaceae
Shrub, an attractive hybrid of two showy species.	2 m
<b>Tecomaria capensis</b>	Bignoniaceae
Cape honeysuckle	
A very hardy bushy or rambling shrub with attractive 3 m	

tubular orange, red, yellow, pink or apricot flowers which attract birds. Suitable for sunny low maintenance areas or hedges.

**Tecomaria capensis subsp. nyassae**

A large rambling shrub with very showy orange flowers attractive to birds.

Bignoniaceae

4 m

**Tephrosia grandiflora**

Pink pea bush, Rooi-ertjie

Small evergreen shrub, bright pink pea flowers in late summer, sow spring or autumn.

Fabaceae

1m

**Tinnea barbata**

Multi-stemmed shrub, compact growth habit, long flowering season during summer, attractive blue flowers, recommended.

Lamiaceae

3 m

**Trichocladus crinitus**

Onderbos, Witch hazel

An evergreen shrub with glossy dark green leaves and brown hairy stems. Produces spidery cream-yellow flowers. Shade.

Hamamelidaceae

3 - 4 m

**Turraea obtusifolia**

Kleinkamferfoelie-boom

Semi-evergreen shrub, glossy foliage, very showy, white unscented star-like flowers, in summer, red seeds remain on bush, suitable for containers, frost-tender, recommended, sow in spring.

Meliaceae

1- 2 m

**Vernonia mespilifolia**

Swartteebossie

Scrambling shrub, large heads of sweetly scented mauve to white flowers.

Asteraceae

4 m

**Xerophyta retinervis**

Monkeys tail, Bobbejaanstert

Slow-growing and rare in cultivation. Flowers after fires. Flowers are solitary on slender stalks, pale to deep mauve in colour. Keep dry in winter. Plant in sandy soil. Occurs naturally on the Witwatersrand.

Velloziaceae

**Xylothea kraussiana**

African dog-rose

White scented flowers in spring, similar to single roses, forest scrub. Good medium sized shrub for shady areas

Flacourtiaceae

7m

but can also grow in full sun position. Protect from severe frost.

## **Zygophyllum foetidum**

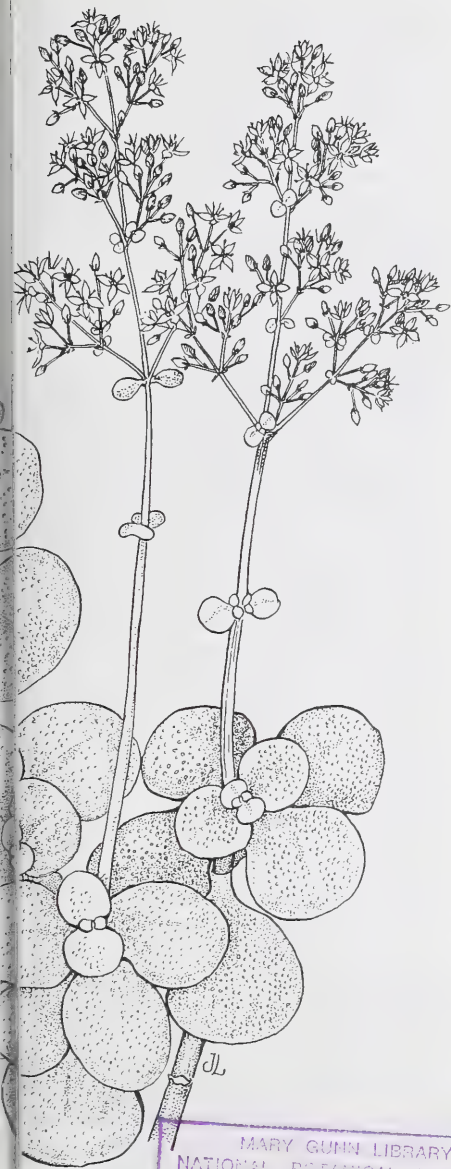
Jakkalspisbos

Sprawling shrub, yellow flowers in winter - summer, sow in autumn.

Zygophyllaceae



Jeanette Loedolff



## GROWING SUCCULENTS

South Africa is well known for its succulent vegetation. These plants are adapted to withstand the long periods of seasonal drought that most of southern Africa experiences. They belong to a number of different families including Mesembryanthemaceae, Asphodelaceae, Crassulaceae, Asclepiadaceae and Portulacaceae.

Succulents are xerophytes (xeros = dry, phyton = plant) and are well represented in the semi-arid regions of South Africa such as the Karoo. They often occur in vast stands, hence the name 'succulent Karoo'. Succulents have fleshy leaves, stems and sometimes swollen roots in which water is stored. Additional adaptations to conserve water include a waxy surface, erect terete (not flat) leaves (the Mesembryanthemaceae) to ensure the least exposure to the sun, and compact leaves (*Crassula columnaris*). Succulents usually have a shallow root system that makes effective use of rainfall.

Succulent plants are easily grown and make excellent pot plants. Care should be taken, however, with soil and watering. The soil should be well drained and the plants watered only when required. The winter rainfall species

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should be watered only during winter and the summer rainfall species only in summer. Most succulent species are easily grown from cuttings rooted in clean river sand. They are also easily propagated from seed sown in well-drained soil.

## PROPAGATION

The propagation of succulents is done by sowing seed, cuttings or simply by taking runners and offshoots. The choice of method of propagation depends on the material available. The time of year in which to carry out these activities is important. Generally, all warm months from September to March are suitable, but there are exceptions. One has to bear in mind that a great number of our succulents come from the winter-rainfall areas of Namaqualand and the south-western Cape, these plants grow in winter and rest during the dry summers, while the succulents that come from the summer-rainfall areas of the country grow in summer and rest in winter. These resting periods must be observed.

In the propagation and cultivation of indigenous succulents, we have to be guided by where a particular species occurs in nature. Though many species, notably the larger aloes, euphorbias, gasterias, some crassulas and shrubby 'vygies', are adaptable to adverse conditions, care has to be taken in the treatment of the highly succulent mimicry forms that generally have to be kept under cover.

### Seed

#### *Soil*

For sowing, the potting medium should

be very sandy. Six parts clean coarse sand, 2 parts soil, 1 part leaf mould or fine composted milled bark and a small quantity of lime makes a suitable mixture for most succulents. Too rich and fresh a compost contains too much organic acid and undesirable fungi spores, and should therefore not be used for a succulent soil mixture. There is no need to be overly precise about the medium, as long as it contains at least 50% coarse sand for sowing purposes; this can be reduced later. The components should be thoroughly mixed and sifted through a half-centimetre sieve. If the medium is too dry it must be moistened: it should fall apart easily when squeezed. And under no circumstances should it be dripping wet. It is not absolutely necessary to sterilize the potting medium, but it certainly helps to eliminate the growth of weeds. Sterilizing can be done by steam-heating the soil or by using chemicals. Sterilized soil should rest for at least 2 to 3 weeks before use to allow for activation by the vital soil bacteria.

#### *Sowing*

The containers must be immaculate. Clay pots, asbestos trays or plastic containers are equally good. Clay pots, however, dry out more quickly than plastic pots, and the mode of watering should be adapted accordingly. Adequate drainage can be assured by covering the drainage holes with flat crocks and by filling the containers up to about a quarter of their depth with stones and crocks. The container should be filled with potting medium to within 1 cm from the rim. Shake the soil down well by knocking the bottom of the containers on a firm base, then press slightly and evenly.

All seed should be covered with a layer of potting medium or coarse sand. This layer should be about as thick as the seed, but not more than twice as thick.

To prevent the seeds from being washed to one side of the container, overhead watering should be avoided. The pots should rather be steeped in a container of water, ensuring even wetting. To prevent excessive loss of moisture during the crucial period of germination, the seed pots should be plunged into a tray of moist sand, covered with a glass plate and shaded with some newspaper. The glass plate must be turned every morning to get rid of condensed water, which collects in big drops. Shading the seed trays is important. If not shaded, the seed-bearing top layer in the container will dry out quickly and many germinating seeds will be destroyed. The glass plate ensures a relatively high humidity in the containers, which is essential for successful germination. In nature the seeds germinate under stones and bushes, when rain, overcast skies and a high atmospheric humidity prevail for a few days. The shaded glass plate simulates these conditions.

#### *Sowing time*

At Kirstenbosch, plants from the winter-rainfall areas are sown in autumn. Although rain does not normally commence before May in Namaqualand, sowing of plants from that area can begin in March when it is still warm. All year germination in the heated frame at approximately 25 °C ground temperature is possible. Germination takes place within 4-10 days in the case of most Mesembryanthemaceae. Aloes take

about 10-14 days to germinate. Quickest are the Asclepiadaceae and *Anacampseros* species which normally germinate within 2-3 days. Winter sowing, however, is not recommended without ground heating. The Western Cape species of *Othonna*, however, are an exception. They give better results under cooler conditions, and should therefore not be sown in the heated frame.

Some species and genera from winter-rainfall areas suitable for autumn sowing (March - May)

*Aloe arenicola*  
*Aloe brevifolia*  
*Aloe dichotoma*  
*Aloe distans*  
*Aloe ferox*  
*Aloe framesii*  
*Aloe glauca*  
*Aloe krapohlana*  
*Aloe melanacantha*  
*Aloe pillansii*  
*Aloe ramosissima*  
*Aloe succotrina*  
*Anacampseros*  
*Argyroderma*  
*Astridia*  
*Berrisfordia*  
*Braunsia*  
*Cephalophyllum*  
*Cheiridopsis*  
*Conicosia*  
*Conophytum*  
*Dactyloopsis*  
*Didymaotus*  
*Diplosoma*  
*Dracophilus*  
*Drosanthemum*  
*Erepsia*  
*Fenestraria*

*Herrea*  
*Herreanthus*  
*Jacobsenia*  
*Juttadinteria*  
*Kensitia*  
*Lampranthus*  
*Leipoldtia*  
*Meyerophytum*  
*Mitrophyllum*  
*Monilaria*  
*Nelia*  
*Odontophorus*  
*Oophytum*  
*Oscularia*  
*Prenia*  
*Psammophora*  
*Psilocaulon*  
*Ruschia*  
*Schlechteranthus*  
*Schwantesia*  
*Semnanthe*  
*Skiatophytum*  
*Smicrostigma*  
*Sphalmanthus*  
*Vanzijlia*

Some plants from the summer-rainfall areas suitable for sowing in spring and summer (September - January)

*Aloe, all other South African aloes.*  
*Aloinopsis*  
*Asclepiadaceae, most species*  
*(stapeliads).*  
*Cyphostemma*  
*Delosperma*  
*Eberlanzia*  
*Euphorbia*  
*Frithia*  
*Gasteria*  
*Gibbaeum*  
*Glottiphyllum*  
*Haworthia*

*Kalanchoe*  
*Khadia*  
*Lithops*  
*Rabiea*  
*Titanopsis*

In the areas with severe winters where conditions are unfavourable, most plants from winter-rainfall areas can be sown at the same time as those from the summer-rainfall areas. In fact, it is advisable to do so with species from very dry and hot areas like the Richtersveld.

#### *Treatment after germination*

As soon as the seeds have germinated, they must be uncovered, but not exposed to full sun. They should be kept in semi-shade and only gradually adapted to more intense light. Watering should continue from below until the roots of the seedlings are firmly established. Once the seedlings are a few millimetres tall and firm, watering should be done from above with a very fine rose. Between waterings the containers should be allowed to dry out slightly. As no definite rule for watering can be given - it depends on too many factors such as temperature, humidity and quality of soil - the seedlings must be watched carefully.

The usually slow-growing dwarf species like *Conophytum*, *Lithops* and a few others, should be allowed to remain undisturbed for a year if the young plants are not too crowded. The faster growing species have to be pricked out a few weeks after germination. They should be planted 3-5 cm apart in suitable trays. The potting medium can now be made slightly richer, but very good drainage should always be provided. It is a good

idea to add small stones and pebbles to the potting medium, as the coarser it is, the better it is aired and drained. For many of the aloes, except those from Namaqualand and Namibia, the potting medium should be made heavier with 2 parts coarse sand, 3 parts good, loamy soil and 1 part leaf mould.

During the first resting period after sowing, the young plants should not be kept completely dry, except in the case of quick growers like species of *Glottiphyllum*. The slow growers, which would still be too small for the total rest period, should be kept in a state of semi-dormancy: they should be watered carefully now and then so that they do not shrink, but also do not actively grow. This watering should be done in the morning, preferably on sunny days, to allow the containers to become dry again towards evening. At the start of the growing season, watering should be increased slowly. By the second dormancy period, the plants should be sturdy enough for a normal rest. But here again, a watchful eye is the best recommendation.

## Vegetative propagation

### Runners

A considerable number of succulents display a creeping habit, such as species of *Lampranthus*, *Ruschia*, *Delosperma*, *Drosanthemum*, *Cephalophyllum*, *Senecio* and *Crassula*. In these cases it is quite easy to take a piece of a rooted shoot and plant it directly into the desired place in the garden.

### Offshoots

Many of the stemless aloes form large clumps with numerous rosettes, either

close to or some distance from the mother plant. These small side rosettes can be cut off with a sharp knife and allowed to dry out for a day or two before being planted into a very sandy soil mixture. If roots are already present, they can be planted directly in their final position in the garden.

### Cuttings

Cuttings are often taken from the shrubby species of the Mesembryanthemaceae (vygies). These cuttings can be taken at any time during the warm months. In cold weather, when growth is reduced, the formation of new roots takes place too slowly, if at all. The best cuttings are the tips of young shoots taken in spring or early summer before they become hard and woody. The cut should be taken directly below a pair of leaves and the lowest pair of leaves on the cuttings should then be removed. The cutting should have about 2-4 pairs of leaves, or more if the nodes are very close. They should be allowed to dry out for a day and then planted in a frame or tray of pure sand or vermiculite, watered thoroughly and placed in the shade. They will need a light watering daily. After 4 weeks the cuttings should have rooted. One can also take hardwood cuttings at the end of summer, which should be planted in sandy soil outside, but rooting is somewhat slower. All these cuttings should be ready to be planted out into the garden by the beginning of winter and should flower in their first spring.

Cuttings of stapeliads and euhorbias are more difficult and the use of rooting hormone is recommended. It is advisable to cut the pieces at the nodes of the mother plants, because the surface of

the cut is smaller and the tissue at the nodes retain the ability of cell division to a higher degree than the tissue along the internodes, thus making root formation easier. *Euphorbia* cuttings can be steeped briefly in hot water to seal off the flow of latex. The cuttings are then dipped in the hormone powder and allowed to dry before they are planted in the rooting medium. In the case of succulent euphorbias, cuttings should be dried out for a few weeks in a shady but dry area.

The containers with the cuttings should be kept indoors for better control. A frame with a ground heating cable is of great benefit. Even so, some euphorbias will develop roots only after many months.

#### *Leaf cuttings*

A number of succulents such as species of *Gasteria*, some species of *Haworthia*, *Crassula* and *Adromischus* can be propagated by leaf cuttings. The leaves are broken off at the base and allowed to dry. They are then laid down on a very sandy soil mixture in a pot or tray and placed in a shady spot. The leaf base must not be inserted into the soil where it might rot. The leaves form roots quite easily this way and soon develop a number of young plants. When they are big enough to be handled, the plants can be separated and planted in containers.

#### **Succulents in the garden**

A rockery is the obvious place for succulents. It can be a natural, informal one or it can consist of a number of formal terraces, depending on the layout and topography of the garden and the taste and preference of the gardener.

The plants will grow well provided the drainage is good. A northern aspect is most suitable, but when building a larger rockery, slopes to other directions should be provided. The southern slope is ideal for many shade-loving succulents like the haworthias, gasterias and many of the crassulas.

#### *Natural rockery*

In a flat garden, a hill of stones must be built up, but care should be taken that the spaces between the stones are filled with soil. When the desired height is reached, the entire stone heap is covered with a thick layer (20-30 cm) of a sandy soil mixture (2-3 parts sand, 2 parts soil and 1 part leaf mould).

When the rocks are built up, one should start at the bottom with the larger ones, which should be laid flat so that those above can partly rest on them. There are no strict rules about how to place the rocks, but it is not aesthetically pleasing to have tall rocks protruding into the air. As a rule, a third to two-thirds of the rock should be buried and its largest diameter should be horizontal, not vertical. Not all the rocks need necessarily touch - some can be positioned on their own.

In a hillside garden advantage can be taken of the natural slope, which is generally well drained. However, should the soil prove to be too heavy, more stones and a light soil suitable for succulents must be added.

Sufficiently large gaps should be left for big plants such as euphorbias and aloes. The spaces between them can be covered with creeping species. Some haworthias do very well in shady crevices on the south side of the rockery. The

shrubby vygies and cotyledons, for instance, also provide protection for the shade lovers.

Care must be taken in selecting plants for the rockery. *Aloe barberae* (formerly *A. bainesii*) and *Euphorbia triangularis*, for instance, are suitable for very large rockeries only. The final size of the rockery must be in proportion to the size of the plants. It is therefore essential to know the approximate size of the mature plants.

### *Terraces*

In hillside gardens it is often necessary to build walls. Cemented walls can be used if small drainpipes, in a regular or irregular pattern, are built in. These pipes must slope down slightly into the wall so that they can be filled with pebbles and soil and allow water to pass through.

However, natural stone walls are far more attractive. The bottom layer of stones

should always be cemented and for every 1 m, a small drainpipe should be allowed. Each layer of stones is topped with 2-3 cm soil before the next row is laid, in the same way as laying a brick wall but without cement. Plenty of pebbles and small rocks behind the walls provide good drainage. The spaces between them are filled with soil. Such dry walls should be built to lean slightly backwards and should not be vertical.

Many tender and difficult plants can be grown in the crevices of such walls in climates otherwise unsuitable for their outdoor cultivation. At Kirstenbosch, with its high rainfall, some species of *Conophytum* and *Cheiridopsis* have survived in such a wall for several years. On top of the terraces, larger plants such as aloes and euphorbias or the shrubby mesembs can be planted. Creeping species hanging elegantly over the walls are also very effective.

## Succulents

### **Adenia hastata**

Passifloraceae

Deciduous climber, tuberous roots, leaves broadly ovate, cream flowers in summer, fruits yellow, frost-sensitive, keep dry during winter, sow spring or summer.

### **Adromischus cristatus**

Crassulaceae

Dwarf, sparingly branched succulent, bearing rounded leaves. Stems covered with dense brownish hairs. An elongated inflorescence of starshaped flowers, pinkish lobes. Suitable for dry summer rainfall rockeries or containers. Propagates easily.

### **Adromischus filicaulis subsp. marlothii**

Crassulaceae

Spreading, mat-forming succulent with grey leaves, clusters of inconspicuous flowers in January, suitable for dry winter rainfall gardens or containers, prefers sandy medium, keep dry during summer.

## **Adromischus montium-klinghardtii**

Crassulaceae

Spreading, mat-forming succulent with grey leaves, clusters of inconspicuous flowers in January, suitable for dry winter rainfall gardens or containers, prefers sandy medium, keep dry during summer.

## **Adromischus roaneanus**

Crassulaceae

Spreading, mat-forming succulent with grey leaves, clusters of inconspicuous flowers in January, suitable for dry winter rainfall gardens or containers, prefers sandy medium, keep dry during summer.

## **Aloe**

## **Asphodelaceae**

Aloes are some of South Africa's most characteristic plants and when in flower, probably also the most attractive. Few people realise that some 150 species occur in South Africa.

The plants are well suited to our South African gardens, but the local climate should be taken into account when a selection is made. Aloes require little or no attention, bloom in winter when few other plants flower, and are most colourful. The flowers attract sun-birds to the garden, can be used in flower arrangements, lasting well.

### **To grow aloes successfully, the following should be kept in mind:**

1. The soil must be well drained.
2. Plant in a sunny spot, preferably on a slope.
3. Add compost when the cuttings are heeled in.
4. The species selected must be suited to the climate.

Most species are easily propagated from stem cuttings or seed. Unfortunately the latter is a slow process. Cuttings can be made in summer, but should be left for two to three weeks before planting to give the wound time to

dry off and heal. They can then be planted directly in their permanent position.

Aloes have beautiful ornamental shapes and therefore remain attractive, even when not in flower. There are shrubby species, such as *Aloe arborescens*, forming handsome round bushes up to about 2 m in height and diameter. This species would do well in most South African gardens. *Aloe ferox* is widespread in the south-eastern Cape and Eastern Cape. The plant is single-stemmed and reaches a height of 1-4†m. *Aloe thraskii*, probably our most beautiful coastal aloe, is also single-stemmed and has recurved leaves.

### **General care and hints**

Do not remove the old leaves as they give character to the plant. Aloes like compost and their growth can be speeded up by supplying them with some once a year. Ask a neighbour for a cutting from a plant that you admire or buy one from a nursery. Most nurseries have aloes in stock. The South African Succulent Society (P.O. Box 1193, Pretoria, 0001) promotes the cultivation and planting of aloes and supplies members with seed free of charge. It also produces an attractive

journal called Aloe.

### Other interesting uses of Aloes

Aloes have been used as medicine for thousands of years. Scientists have found that *Aloe vera* contains antibiotic elements and also has a pain-killing effect. That is why this species is used in medicine as well as cosmetics. For the past two centuries the sap of our

own *Aloe ferox* has been tapped and used in a variety of products. Eastern Cape farmers feed the leaves to their cattle and fowls to rid the animals of ticks and tampons.

Our own quiver tree, *Aloe dichotoma*, was used by the Bushmen for making quivers for their arrows. In Namaqualand the tree is sawn into logs from which coolers and shacks are made.

### **Aloe aculeata**

Stemless, solitary plants with leaves in a basal rosette, thorny leaves, orange-yellow flowers during winter.

Asphodelaceae  
500 - 700 mm

### **Aloe affinis**

Low rosette of spotted leaves, orange-red flowers anytime between autumn and spring, hardy.

Asphodelaceae  
1 m

### **Aloe africana**

Uitenhage aloe

Solitary plants with recurved leaves, orange-red flowers in winter, recommended.

Asphodelaceae

### **Aloe arborescens**

Krantz aloe, Kransaalwyn

Branched rounded plant with numerous leaf rosettes, many orange-red flower spikes in autumn and early winter, recommended.

Asphodelaceae

1 - 3 m

### **Aloe arenicola**

Spreading with long branches, forming groups up to 2 m in diameter, the simple or branched inflorescence appears during mid-summer bearing red-pink flowers, suitable for sunny well-drained dry winter rainfall coastal gardens, keep dry during summer.

Asphodelaceae  
2 m

### **Aloe aristata**

A small compact cluster-forming dwarf aloe with short green leaves and orange-red flowers in summer. Suitable for rockeries and containers. Easy to propagate from off-sets, frost hardy.

Asphodelaceae  
200 mm

### **Aloe barberiae**

Tree aloe, Boomaalwyn

Asphodelaceae

This striking tree forms a rounded crown. It has deeply grooved green recurved leaves and rose-pink flowers in mid-winter. Grows in humid, sub-tropical, summer rainfall areas, is frost sensitive, sow in spring.

### **Aloe branddraaiensis**

Small stemless aloe, leaves spotted, plant in light shade or full sun where frost is not too severe, orange-red flowers in branched panicles, flowers in mid-winter.

Asphodelaceae  
250 - 350 mm

### **Aloe brevifolia var. brevifolia**

Dense, cluster-forming plants with small grey heads up to 100 mm in diameter, flower spike simple during late spring with red-pink flowers, suitable for sunny well-drained coastal gardens, keep dry during summer.

Asphodelaceae

### **Aloe broomii**

A medium size unbranched aloe with upright green leaves in a dense rosette up to 600 mm in diameter. Single upright flowering stem, orange flowers in winter. Suitable for well drained summer rainfall gardens in a sunny position, frost tolerant.

Asphodelaceae

### **Aloe buhrii**

A medium sized aloe with upright flecked green leaves in a rosette up to 600 mm in diameter. Plant suckers at base and forms groups up to 3 m in diameter. Branched upright flowering stem, orange to yellowish flowers in spring.

Asphodelaceae

### **Aloe candelabrum**

A solitary aloe with outwardly arching leaves in a 2 m rosette. An erect flower spike of deep scarlet flowers, like thick candles, during mid-winter. Suitable for dry bushveld gardens.

Asphodelaceae

### **Aloe chabaudii**

A beautiful medium sized aloe forms dense groups, winter-flowering species with masses of coral-red flowers. Leaves are grey and spotted.

Asphodelaceae

### **Aloe ciliaris**

A hardy climber with stems up to 5 m long with leaves in a loose rosette around the stem. Flowering spikes conspicuous throughout the year.

Asphodelaceae

<b>Aloe claviflora</b>	Asphodelaceae
Solitary at first dividing to form small groups, stem, compact, procumbent, inflorescence a horizontal spike, orange-red flowers, rough grey-green leaves, attractive, for dry summer rainfall gardens, frost-resistant.	
<b>Aloe commixta</b>	Asphodelaceae
Succulent shrub, bearing elongated sparingly branched stems. Flowers yellowish to orange during spring, rocky slopes.	1m
<b>Aloe comosa</b>	Asphodelaceae
Solitary aloe with grey-green leaves in rosette, flowers red-pink, suitable for sunny well-drained dry gardens, keep dry during summer, sow autumn.	2 m
<b>Aloe comptonii</b>	Asphodelaceae
Plants with grey divided heads forming small groups. Leaves erect inwardly curved and flowers in branched rounded heads during spring and summer.	
<b>Aloe cooperi</b>	Asphodelaceae
Plants solitary or in small groups. Leaves long and narrow, arranged in a fan-shade, smooth dotted with white on the outside and edged with small white teeth.	
<b>Aloe cryptopoda</b>	Asphodelaceae
Winter-flowering aloes, medium sized stemless aloe, solitary or forming small groups, dense spikes of scarlet flowers tipped with green, neat foliage, forming a tuft of narrow pointed, greyish-green leaves with small, reddish-brown thorns.	
<b>Aloe dichotoma</b>	Asphodelaceae
Quiver tree, Kokerboom	
Desert aloe with a rounded crown, hardy, protect against rain in wet regions, dichotomously branched, grey-green leaves, conspicuous bright yellow flowers, winter.	2 - 4 m
<b>Aloe dyeri</b>	Asphodelaceae
Stemless, solitary medium-sized aloe with spotted leaves, flowers red in dense erect panicles.	
<b>Aloe erinacea</b>	Asphodelaceae
Small aloe, a dense rosette of rough grey leaves with white thorns. Plants divide to form dense groups. The	

tubular reddish flowers are borne on an erect raceme in winter. Suitable for dry winter rainfall karoo gardens. Propagate from seed or division.

**Aloe esculenta**

Asphodelaceae

Plants medium sized, dividing to form dense clusters, leaves spotted, flowers reddish during winter.

**Aloe ferox**

Asphodelaceae

Bitter aloe, Bitteraalwyn

Single-stemmed plant, bearing erect spiny leaves, flowers in erect candles orange, yellowish to red, during winter, good accent plant.

2 m

**Aloe fosteri**

Asphodelaceae

Stemless or with short stems, leaves greyish-green, mottled, branched inflorescence, flowers in autumn, orange, attractive.

**Aloe gariepensis**

Asphodelaceae

Solitary or sometimes divided medium sized aloe. Leaves erect suffused red, flowers greenish-yellow during winter or spring.

300 mm - 1 m

**Aloe hereroensis**

Asphodelaceae

Single stemmed aloe forming a large rosette, orange flowers in winter, tolerant of light frost, suitable for summer rainfall arid gardens.

2 m

**Aloe khamiesensis**

Asphodelaceae

Namaqua aloe

A large aloe with flecked green leaves, the stem is simple or branched and covered with persistent old leaves, rosettes up to 800mm in diameter. Erect inflorescence with orange to yellow flowers in winter. Suited to a well drained winter rainfall garden.

2m

**Aloe krapohlina**

Asphodelaceae

A charming stemless dwarf aloe, tufts of fat, curved, yet upright leaves, greyish-green, smooth and edged with small, stiff prickles, showy scarlet-red flowers on solitary spikes during winter.

**Aloe littoralis**

Asphodelaceae

Mopane aloe

A large single aloe with a dense rosette of flecked leaves

3-4 m

up to 800 mm in diameter. Suitable for dry summer rainfall gardens, produces a many-branched inflorescence of orange flowers in winter.	
<b>Aloe lutescens</b>	Asphodelaceae 1.2 m
Short stemmed, leaves up to 600 mm long, in dense rosettes, yellowish green, with pinkish toothed margins, inflorescence laxly branched open, flowers orange, June to September.	
<b>Aloe maculata (A. saponaria)</b>	Asphodelaceae 400 mm
A stemless aloe with spotted leaves in a rosette. Easy to propagate from suckers, for sunny positions and rockeries. The simple or branched inflorescences appear during winter bearing red-pink flowers.	
<b>Aloe marlothii</b>	Asphodelaceae 2 - 3 m
Solitary erect aloe leaves very thorny, Inflorescence with horizontal ascending candles of amber-yellow flowers. Suitable for dry summer rainfall gardens.	
<b>Aloe melanacantha</b>	Asphodelaceae
Small aloe, dividing to form dense clusters. Leaves rough, dark green, bearing black spines. Inflorescence solitary during mid-winter.	
<b>Aloe microstigma</b>	Asphodelaceae
Small aloe, either solitary or in clusters, spotted leaves, orange-yellow bicoloured flowers in winter.	
<b>Aloe mitriformis</b>	Asphodelaceae 300 - 600 mm
Procumbent, spreading aloe with grey leaves, branched from the base, red flowers in striking rounded heads during summer, suitable for dry winter rainfall gardens.	
<b>Aloe monotropa</b>	Asphodelaceae 150 - 300 mm
Attractive rare Aloe, proliferating from the base to form dense groups, recurved spotted leaves, inflorescence a panicle during summer. Suitable for containers and rockeries, keep dry in winter.	
<b>Aloe parvibracteata</b>	Asphodelaceae
Stemless aloe proliferating from the base forming dense groups, mottled leaves. Inflorescence a branched panicle of red flowers during mid-winter.	

**Aloe petricola**

Asphodelaceae

Stemless aloe dividing to form groups of large rosettes, ascending glaucous leaves, inflorescence branched, bi-coloured white and red, July.

**Aloe pictifolia**

Asphodelaceae

Small clusters, linear-lanceolate spotted leaves, flowers orange in winter or spring. Suitable for containers or dry summer-rainfall rockeries, sow in spring.

**Aloe pillansii**

Asphodelaceae

10 m

Erect, branched with grey leaves, the branched inflorescence appears during spring bearing yellow flowers, suitable for arid winter rainfall areas, sunny, well-drained gardens, keep dry during summer, sow during autumn.

**Aloe plicatilis**

Asphodelaceae

Fan aloe, Waaieraalwyn

3 - 5 m

Striking arborescent shrub, with corky grey stems which branch dichotomously, end in fans of distichous leaves, simple inflorescence ends in a cylindrical raceme of scarlet flowers, easily grown from seed, slow growing.

**Aloe pluridens**

Asphodelaceae

1 - 2 m

Erect, rosette with green to yellow-green ascending recurved leaves, red flowers in winter.

**Aloe ramosissima**

Asphodelaceae

Maidens quiver tree

2 m

Desert Aloe, branched at ground level forming a rounded shrub with narrow, grey-green leaves, prefers dry winter-rainfall areas, yellow flowers during mid-winter.

**Aloe reitzii**

Asphodelaceae

Solitary stemless aloe with rosette of grey-green spiny leaves. Bears thick compact spikes of downward-pointing clear flowers, turning yellow underneath, in late summer or autumn, branched flower-stalk forms torch-like candelabra. Summer

**Aloe reynoldsii**

Asphodelaceae

Cluster forming small aloe with mottled leaves. Inflorescence a panicle of yellow or orange flowers during spring. Suitable for rockeries or containers.

<b>Aloe rupestris</b>	Asphodelaceae
Bottlebrush aloe, Borselaalwyn	
Tall, slender, single-stemmed aloe with rosette of spreading leaves, branched long-lasting red flower spikes in mid-winter, frost-tender.	3 - 4 m
<b>Aloe speciosa</b>	Asphodelaceae
Tilt-head aloe, Slaphoringaalwyn	
Single-stemmed succulent, form-plant, bearing glaucous leaves and a simple inflorescence of white-pink flowers, August.	1 - 4 m
<b>Aloe spectabilis</b>	Asphodelaceae
Natal aloe	
Single -stemmed, large aloe with ascending spiny leaves, hardy, red and yellow flower spikes in July.	2-4m
<b>Aloe striata</b>	Asphodelaceae
Coral aloe, Koraalaalwyn	
Plants solitary. Bright showy flowers and smooth, attractive foliage without prickles, leaves palest green edged with light coral-red and are sometimes flushed with pink, August to September in a flattened mass at the top of the branching stem.	1 m
<b>Aloe striata subsp. karasbergensis</b>	Asphodelaceae
Solitary aloe, distinctly striated grey-green leaves, inflorescence a rounded panicle of orange flowers. Suitable for summer rainfall karoo areas, sow spring or summer.	
<b>Aloe striata x maculata</b>	Asphodelaceae
Attractive medium-sized stemless aloe with tapering, spreading leaves proliferating from the base and forming dense groups. Margin armed with pinkish teeth. Flowers in a dense rounded panicle during winter, attractive pink. Suitable for rockeries.	
<b>Aloe succotrina</b>	Asphodelaceae
Cluster forming aloe with narrow tapering speckled leaves. Simple inflorescence bearing glossy red flowers during winter. Suitable for winter rainfall and coastal gardens.	1 m
<b>Aloe suprafoliata</b>	Asphodelaceae
Almost stemless, grey-green leaves in a dense spiral	

rosette. Inflorescence unbranched, flowers red with green tips during winter. Suitable for summer rainfall gardens.

### **Aloe tenuior**

Sparingly branched shrubby aloe with sheathing, long, narrow leaves, becoming crowded into a loose rosette at the tip, edged with very tiny white teeth, the flower-stalk bearing reddish flowers during winter and summer, mainly in spring.

Asphodelaceae  
1 m

### **Aloe thompsoniae**

Grows ideally as a container plant or in a rockery in shade, short suckering stems bearing rosettes of narrow tapering, pale green leaves, smooth and edged with minute teeth, short spike of clear bright orange flowers tipped with green, mid summer.

Asphodelaceae

### **Aloe thraskii**

A tall stemmed aloe, old stem is covered with dried leaves and is topped with a rosette of downward-curving leaves, leaves are deeply grooved, pointed and edged with fine, reddish teeth. Inflorescence a loose panicle of orange-yellow flowers, in winter.

Asphodelaceae

### **Aloe vandermerwei**

Koos-aalwyn

Small aloe with spotted leaves, proliferating from the base to form dense groups, attractive orange-red flowers in winter, suitable as a groundcover also does well in containers.

Asphodelaceae

300 mm

### **Aloe variegata**

Dwarf succulent, clump-forming, leaves triangular, mottled, inflorescence branched, pink to scarlet flowers in winter and spring. Must be planted in very well-drained soil in summer rainfall areas, stemless and leaves overlap to form a tuft.

Asphodelaceae

### **Aloe verecunda**

Erect tufted aloe, bright red pendulous flowers in summer, propagate from off sets around base. Suitable for highveld gardens or grown elsewhere as a pot plant.

Asphodelaceae

### **Aloe viridiflora**

Solitary aloe, grey green striated leaves, green flowers, branched inflorescence during late winter or spring.

Asphodelaceae

- Aloinopsis acuta** Mesemb.  
Stemless dwarf succulent with a fleshy tuber. Leaves fleshy and flowers yellow. Suitable for containers, keep dry in winter.
- Aloinopsis luckhoffii** Mesemb.  
Dwarf rosulate succulent, yellow vygie flowers in autumn, prefers limestone soil, best in containers, keep dry during winter, sow spring or summer.
- Aloinopsis malherbei** Mesemb.  
Dwarf with subterranean tuber. Leaves in a rosette, flowers yellowish, suitable for containers, water sparingly during summer, keep dry in winter.
- Aloinopsis rosulata** Mesemb.  
Small compact dwarf succulent, leaves in a rosette, suitable for containers in sandy, well-drained medium, preferably in a green-house or sunny areas, flowers yellow to white, easily grown from division or seed, water sparingly. medium.
- Aloinopsis rubrolineata** Mesemb.  
Dwarf compact succulent with tuberous roots, bearing yellow flowers with reddish striations, best cultivated in containers, preferably in a green-house, keep dry during winter.
- Aloinopsis schooneesii** Mesemb.  
Dwarf compact 'mesem' with fleshy roots, yellowish-orange flowers, summer-rainfall gardens, preferably in containers.
- Aloinopsis setifera** Mesemb.  
Dwarf compact 'mesem' with fleshy roots, yellowish-orange flowers, summer-rainfall gardens, preferably in containers.
- Aloinopsis villetii** Mesemb.  
Dwarf compact 'mesem' with fleshy roots, rough grey-green leaves and yellowish-orange flowers, summer-rainfall gardens, preferably in containers.
- Anacampseros albidiflora** Portulacaceae  
Dwarf compact branched succulent, hairy leaves, small white flowers, best in containers, sow spring or summer.

<b>Anacampseros arachnoides</b>	Portulacaceae
Haaskos	
Dwarf succulent shrublet, green succulent leaves, flowers white tinged mauve, mid summer.	
<b>Anacampseros filamentosa</b>	Portulacaceae
Dwarf rosulate succulent with hairy stems and pink flowers, leaves becoming reddish during dry conditions, flowers pink, during late spring, suitable for small containers, keep in a warm sunny spot.	
<b>Anacampseros retusa</b>	Portulacaceae
Dwarf perennial with grey bristly branches, fleshy and blunt leaves in a rosette, flowers pink. Best in a container under controlled greenhouse conditions.	40mm
<b>Anacampseros rufescens</b>	Portulacaceae
Small rosette succulent, leaves turn reddish in the sun, small pinkish flowers. Suited to dry rockeries, sow spring or summer.	
<b>Anacampseros telephiastrum</b>	Portulacaceae
Clump-forming, compact growth, flowers carmine, late afternoon. Best in dry rockeries. Easily propagated from seed.	
<b>Antegibbaeum fissoides</b>	Mesemb.
Compact cluster forming succulent, finger-like leaves, violet-red flowers. Water sparingly winter and summer. Best grown in a greenhouse outside of karoo region.	
<b>Argyroderma congregatum</b>	Mesemb.
Stemless, dwarf, clump-forming succulent, greyish-green leaves, yellow flowers.	
<b>Argyroderma delaetii</b>	Mesemb.
Dwarf tufted succulent, with grey rounded leaves, resembling a pebble, flowers yellow or mauve, during autumn, best cultivated in containers, preferably in a green-house, keep dry during summer.	
<b>Argyroderma fissum</b>	Mesemb.
Dwarf plant, clump-forming, leaves short and finger-like, flower red, yellow or pink.	
<b>Argyroderma framesii subsp. framesii (var. minus)</b>	Mesemb.
Dwarf tufted perennial up to 60 mm in diameter bearing	

fused round silvery leaves. Flowers bright pink-purple, during winter. Suitable for small containers. Keep dry in summer.

**Argyroderma framesii subsp. hallii**

Mesemb.

Dwarf cluster forming 'mesemb', grey-white leaves, purple flowers in winter, sow in autumn.

**Argyroderma pearsonii**

Mesemb.

Stemless unbranched succulent, fleshy semi-globose leaves, flowers purple and white.

**Argyroderma ringens**

Mesemb.

Dwarf clump forming succulent, grey-green rounded leaves, like a pebble, flowers yellow, autumn, best in containers, preferably in a green-house, keep dry in summer.

**Astroloba bullulata**

Aloaceae

Small tufted succulent branched from the base and with leafy stems, leaves rough, green and spreading, flowers inconspicuous, white, appearing during summer, suitable for containers in shady areas, water sparingly.

**Astroloba rugosa**

Aloaceae

Dwarf tufted succulent branched from the base and with leafy stems. Leaves are rough, green and spreading. Flowers are inconspicuous, white, appearing during summer, suitable for containers in shady areas, water sparingly.

**Avonia albissima**

Portulacaceae

Sprawling dwarf succulent, large white scale like bracts cover and protect the leaves, white flowers, best in containers, sow spring or summer.

**Bergeranthus glenensis**

Mesemb.

Dwarf, clump-forming succulent, narrow leaves, flowers yellow, sow in autumn, pot culture.

**Bergeranthus sp.**

Mesemb.

Dwarf compact rosette succulent, yellow flowers, summer rainfall karoo, sow spring, summer or autumn, best kept in a container.

**Bijlia dilatata (B.cana)**

Mesemb.

Stemless, compact rosette, flowers yellow. Water

sparingly, best grown in containers under greenhouse conditions.

**Bowiea volubilis**

Hyacinthaceae

Large exposed green bulb with green climbing succulent branches, small white flowers, attractive pot plant in shady conditions, keep dry in winter.

**Braunsia apiculata**

Mesemb.

Branched succulent shrublet with swollen leaf pairs and magenta flowers. Best in dry rockeries or containers.

150 mm

**Braunsia geminata**

Mesemb.

Branched succulent shrublet with silvery-grey leaf pairs and pink flowers, suitable for pot culture or rockeries, winter-growing, sow in autumn.

100 mm

**Bulbine abyssinica**

Asphodelaceae

Succulent leaves in a basal rosette, drought-resistant, bright yellow flowers in spring and summer. Best grown as a bedding plant or in rockeries.

400 - 600 mm

**Bulbine frutescens**

Asphodelaceae

Rankkopies

Branched spreading growth with succulent leaves, yellow flower spikes in spring, summer and autumn, good groundcover in full sun.

100 - 400 mm

**Bulbine latifolia**

Asphodelaceae

Rooiwortel

Rosette of succulent leaves, evergreen, yellow flowers during spring, recommended for rockery. Plants fast growing need replacing after 3 or 4 years.

400 mm

**Bulbine margarethae**

Asphodelaceae

Attractive dwarf succulents with mottled leaves in a rosette, suitable for containers, keep in light shade or full sun, keep dry in summer. Best grown under greenhouse conditions.

**Carpanthea pomeridiana**

Mesemb.

Vetkousie

Spreading annual vygie, golden yellow vygie flowers in spring, sow autumn. For dry coastal gardens, suitable for the Cape Flats.

300 mm

- Carpobrotus**      **Mesembryanthemaceae**  
 Perennial succulents with long trailing stems and long fleshy leaves. The leaves have triangular sides, taper to the tips and are grouped together in pairs along the stems. These plants are well-known because most of the species have large fruits which are suitable for eating when dry. The fruits are brown when ripe and have soft juicy centres scattered with seeds, resembling miniature figs, the tart flavour is an acquired taste, but very popular, the fruit is available for sale.  
 These are coarse plants, that are best suited to covering a bank or a barren piece of ground, where little else will grow, the trailing stems form a curtain or dense mat of thick leaves. They are ideal for covering sandy soil at the sea, being particularly drought resistant at the coast, not to be over watered and need a very well-drained position in the summer-rainfall areas.
- Carpobrotus acinaciformis**      Mesemb.  
 Suurvy.  
 Procumbent groundcover with glaucous leaves and large purple flowers, suitable for difficult coastal conditions but will grow elsewhere, excellent for embankments, soil retaining. Fruit edible and makes delicious jam.
- Carpobrotus deliciosus subsp. deliciosus**      Mesemb.  
 Spreading, succulent leaves, large pink flowers, excellent groundcover, drought-resistant, fruit edible and makes delicious jam.
- Carpobrotus edulis subsp. edulis**      Mesemb.  
 Hottentot fig, Sour fig, Suurvy  
 Spreading succulent leaves, big yellow flowers turning pink, excellent groundcover on sandy soil, fruit edible.  
 Sow autumn.
- Carpobrotus muirii**      Mesemb.  
 Spreading groundcover with green to purplish-green leaves and large purple spring flowers, fruit edible, suitable for sunny, windy difficult coastal conditions but will grow elsewhere, excellent for embankments, soil retaining.
- Carruanthus ringens**      Mesemb.  
 Dwarf tufted succulent with attractive spreading toothed leaves, flowers yellow, spring and early summer, best cultivated in containers, preferably in a green-house, water sparingly during winter and summer.

<b>Carruanthus sp.</b>	Mesemb.
Dwarf tufted succulent with attractive spreading dentate leaves, flowers yellow, spring and early summer, best cultivated in containers, preferably in a greenhouse, water sparingly in winter and summer.	
<b>Cephalophyllum alstonii</b>	Mesemb.
Rankvygie	
Prostrate succulent, large brilliant crimson flowers, spring.	500 mm
<b>Cephalophyllum aureorubrum</b>	Mesemb.
Clump-forming, large yellow to orange flowers in midwinter.	140 - 170 mm
<b>Cephalophyllum caespitosum</b>	Mesemb.
Cluster forming compact 'vygie' resembling Cheiridopsis, purple flowers in winter, sow in autumn.	
<b>Cephalophyllum ceresianum</b>	Mesemb.
Decumbent matforming succulent, suitable as groundcover for dry winter-rainfall gardens, easily propagated from cuttings or division, flowers yellow.	
<b>Cephalophyllum corniculatum</b>	Mesemb.
Compact succulent groundcover, reddish-purple flowers, long rounded leaves, suitable for dry winter rainfall gardens.	120 mm
<b>Cephalophyllum curtrophyllum</b>	Mesemb.
Flat growing and matforming succulent suitable as ground cover for dry winter rainfall gardens. Flowers to 40 mm purple-pink best propagated from cuttings or division.	
<b>Cephalophyllum middlemostii</b>	Mesemb.
Decumbent matforming succulent, suitable as groundcover for dry winter-rainfall gardens, easily propagated from cuttings, flowers mauve.	
<b>Cephalophyllum pillansii</b>	Mesemb.
Decumbent matforming succulent, suitable as groundcover for dry winter-rainfall gardens, flowers yellow.	
<b>Cephalophyllum pillansii var. grandiflorum</b>	Mesemb.
Decumbent matforming succulent, suitable as	

groundcover for dry winter-rainfall gardens, large yellow flowers with a red centre, sow autumn.

### **Cephalophyllum pulchellum**

Mesemb.

Procumbent succulent plant rooting at nodes, flowers purple, spring, suitable as groundcover for dry winter rainfall gardens.

### **Cephalophyllum subulatoides**

Mesemb.

Low-growing, showy magenta flowers in spring, suitable for dry winter-rainfall rockeries.

### **Ceraria fruticulosa**

Portulacaceae

1.5 m

Erect branched shrub, bearing purplish stems and green leaves. Flowers pink, in sprays, roots succulent, spreading. Suitable for dry winter-rainfall gardens or as a container plant.

### **Ceraria namaquensis**

Portulacaceae

2 m

Erect sparingly branched shrub bearing grey-white stems and small rounded green leaves in tufts, flowers pink, roots succulent, spreading. Suitable for dry karoo gardens where frost is not severe.

### **Cerochlamys pachyphylla**

Mesemb.

Dwarf tufted succulent with spreading oblong leaves, flowers pink-purple, early spring, best in containers, preferably in a green-house, water sparingly during winter and summer.

### **Ceropegia barklyi**

Asclepiadaceae

Climbing succulent with bulbous rootstock, deciduous, 35 mm flowers with swollen bases in summer, suitable for cultivation and as a rockery plant in summer rainfall area, keep dry in winter.

### **Ceropegia woodii**

Asclepiadaceae

Attractive mottled leaves, tuber, for pots, indoors, keep dry in winter.

### **Chasmatophyllum musculinum**

Mesemb.

Dwarf mesem with procumbent branches. Leaves green to grey-green, oblong three-angled to semi-cylindrical with blunt teeth at the apex. Flowers yellow, opening towards the late afternoon. Water during summers, best in well drained aspect.

- Cheiridopsis aspera** Mesemb.  
150 mm  
Dwarf, clump-forming perennial succulent with united leaf pairs, large yellow flowers, winter-growing, dry resting period in summer, sow autumn, pot culture, glasshouse.
- Cheiridopsis brownii** Mesemb.  
30 - 50 mm  
Stemless, small, compact, tufted succulent forming cushions up to 150 mm in diameter, yellow flowers, sow in autumn. Suitable for containers under greenhouse conditions.
- Cheiridopsis carinata** Mesemb.  
Tufted mesem bearing white flowers to 70 mm in diameter. Leaves oblong. Suitable for dry winter rainfall karoo gardens or pot culture under greenhouse conditions. Propagates easily from cuttings, sow seed in the autumn.
- Cheiridopsis cigarettifera** Mesemb.  
150 - 180 mm  
Stemless tufted dwarf plant, flowers yellow, for containers in sunny position, keep dry in summer.
- Cheiridopsis denticulata** Mesemb.  
Stemless dwarf plant, grey leaves with teeth at the leaf tip, flowers pale straw-yellow, best in containers or dry winter rainfall rockeries.
- Cheiridopsis derenbergiana** Mesemb.  
Clump forming succulent, attractive purple flowers, suitable for containers, keep dry in summer, water sparingly in winter.
- Cheiridopsis excavata** Mesemb.  
Dwarf clump forming succulent, oblong leaves, flowers yellow, early spring, best cultivated in containers, preferably in a green-house, sow autumn, keep dry in summer.
- Cheiridopsis imitans** Mesemb.  
Dwarf clump forming succulent with oblong leaves, flowers yellow, early spring, best in containers, in a green-house, sow autumn, keep dry in summer.
- Cheiridopsis peculiaris** Mesemb.  
Mimicry plant, Mimiekplant  
Dwarf plant, with succulent spreading leaves, opposite

leaves, flowers yellow, keep dry in summer, pots in sunny position, best in greenhouse, rare.

**Cheiridopsis pillansii**

Mesemb.  
500 mm

Small clump-forming succulent, chunky greyish leaves, flowers yellow, pink or orange, glasshouse subject.

**Cheiridopsis pulverulenta**

Mesemb.

Dwarf, clump-forming, leaves covered with fine white papillae, flowers yellow. Best in containers as a greenhouse subject.

**Cheiridopsis purpurata**

Mesemb.

Dwarf clump-forming succulent with oblong leaves, flowers yellow, early spring, best in containers in a green-house, sow autumn, keep dry in summer.

**Cheiridopsis robusta**

Mesemb.

Stemless leaf succulent with bluish-green leaves, yellow flowers in spring. Best in containers as a greenhouse subject.

**Cheiridopsis schlechteri**

Mesemb.

Dwarf cluster-forming vygie, yellow flowers in winter. Best in a container as a greenhouse subject.

**Cheiridopsis speciosa**

Mesemb.

Stemless clumps of fleshy leaves with purple flowers, plant in pots and miniature rockeries, best in a greenhouse, keep dry in summer.

**Cheiridopsis turbinata**

Mesemb.

Clump-forming succulent, yellow spring flowers, for dry winter rainfall rockeries. Elsewhere in containers and keep dry in summer.

**Cheiridopsis vanzylii**

Mesemb.

Low, compact fleshy leaves, flowers rich yellow. Best in containers under controlled conditions, keep dry in summer.

**Cheiridopsis verrucosa**

Mesemb.

Dwarf tufted succulent with oblong leaves, flowers yellow, early spring, best in containers in a green-house, sow autumn, keep dry in summer.

**Cissus quadrangularis**

Vitaceae

Creeper, square stems, for dry summer rainfall gardens, keep dry in winter, full sun or light shade. Suitable for containers.

**Cleretum herrei**

Mesemb.

Prostrate annual vygie, divided leaves, small yellowish flowers in winter. Sow in autumn.

**Cleretum papulosum**

Mesemb.

Small winter-growing succulent annual with spreading, glittering leaves, flowers small, yellow, spring, sow autumn.

**Cleretum papulosum subsp. schlechteri**

Mesemb.

Yellow bokbaaivygie

Annual, similar to 'Bokbaaivygies' but leaves more papillate, yellow flowers in spring, sow autumn.

200 mm

**Conicosia pugioniformis**

Mesemb.

Gansies, Varkslaa

Clump forming perennial or biennial vygie, leaves up to 200 mm long, flowers sulphur-yellow, on long peduncles, spring, sow autumn.

**Conophytum**

Mesembryanthemaceae

Conophytums are dwarf succulents with their leaves fused into a roundish body. They occur as single plants or divide to form small clusters.

The flowers are yellow, white, pink or purple, with a tubular base, are borne during autumn. Suitable for containers, keep dry during summer. Sow autumn or winter.

**Conophytum bilobum subsp. bilobum**

Mesemb.

Cluster forming, flowers yellow, during autumn.

**Conophytum breve**

Mesemb.

Tufted growth, yellow flowers in autumn.

**Conophytum burgeri**

Mesemb.

Dwarf solitary cone-shaped succulent, pink flowers.

**Conophytum calculus subsp. calculus**

Mesembryanthemaceae

Attractive grey-green spherical leaves. Yellow flowers, in autumn.

**Conophytum flavum**

Mesemb.

Yellow flowers in autumn.

<b>Conophytum frutescens</b>	Mesemb.
Yellow flowers.	
<b>Conophytum meyeri</b>	Mesemb.
Tufted, prominently bilobed, flowers yellow in autumn.	
<b>Conophytum minutum var. minutum</b>	Mesemb.
Cluster forming, pink flowers in autumn.	
<b>Conophytum obcordellum</b>	Mesemb.
Forms lax cushions, leaves mottled, flowers white to pink during autumn.	
<b>Conophytum quaesitum subsp. quaesitum</b>	Mesemb.
Cluster form, grey bodies, straw-yellow to white flowers in late autumn.	
<b>Conophytum subfenestratum</b>	Mesemb.
Dwarf, solitary, like a lithop, white flowers in autumn.	
<b>Conophytum truncatum subsp. truncatum</b>	Mesemb.
Plants tufted, cushion shaped, white or yellow flowers in autumn.	
<b>Conophytum uviforme</b>	Mesemb.
Cluster form, cushion shaped, flowers yellow or pink in autumn.	
<b>Conophytum uviforme var. subincanum</b>	Mesemb.
Flowers white during autumn.	
<b>Conophytum velutinum subsp. velutinum</b>	Mesemb.
Cluster form, pink flowers in autumn.	
<b>Corallocarpus dissectus</b>	Cucurbitaceae
Cucurbit family. Rounded caudex the size of a man's fist, climbing branches, dissected leaves, red or orange fruits. Keep dry in summer.	

## Cotyledon

### Crassulaceae

Shrubby succulents with thick stems which bear clusters of decorative, oval, succulent leaves. The leaves may be plain green or covered with a white bloom and each leaf is edged with a thin, glossy, red line. The flower-stalk grows from the centre of the leaf cluster and bears a head of drooping flowers,

orange-red in colour, shaped like a tube which opens into five curled-back pointed petals, flowering mid-summer. They grow in hot sandy places, storing water in their fleshy leaves. They are drought resistant and can withstand several degrees of frost. Suitable for containers or well-drained gardens. Sow in summer, easily propagated from cuttings.

<b>Cotyledon adscendens</b>	Crassulaceae
Semi-scandent to erect succulent, attractive green foliage, red pendulous flowers in summer. Suitable for rockeries.	
<b>Cotyledon barbeyi</b>	Crassulaceae
Shrubby succulent, attractive green foliage, flowers red, winter. Suitable for summer-rainfall rockeries.	
<b>Cotyledon campanulata</b>	Crassulaceae
Small shrubby succulent, with attractive finger-like leaves, flowers yellow, summer, suitable for containers or well-drained gardens, sow summer.	
<b>Cotyledon orbiculata var. flanaganii</b>	Crassulaceae
Erect succulent, attractive finger-like leaves, red flowers, summer.	
<b>Cotyledon orbiculata var. oblonga</b>	Crassulaceae
Spreading shrubby succulent, leaves large with white bloom, inflorescence up to 1 m tall, flowers orange-red, red or yellow.	
<b>Cotyledon orbiculata var. orbiculata</b>	Crassulaceae
Plakkie	1 m
Branched succulent with opposite, rounded, green to grey leaves, usually with a red margin. Panicles of red, orange or yellow flowers. Hardy.	
<b>Cotyledon orbiculata var. spuria</b>	Crassulaceae
Upright, shrubby, leaves in opposite pairs, powdery bloom, flowers orange-red, summer.	
<b>Cotyledon papillaris</b>	Crassulaceae
Mat-forming spreading succulent, attractive small grey-green leaves, reddish flowers, mid-summer.	
<b>Cotyledon tomentosa subsp. tomentosa</b>	Crassulaceae
Shrub, leaves fleshy and hairy, flowers reddish, can be grown in a pot or miniature rockery.	
<b>Cotyledon velutina</b>	Crassulaceae
Erect succulent shrub, attractive green foliage, red to yellowish flowers, summer. Suitable for a dry summer-rainfall garden.	

<b>Cotyledon woodii</b>	Crassulaceae	Much branched succulent shrub with grey to green 600 mm leaves. Flowers red-pink. Suitable for dry summer- or winter-rainfall garden.
<b>Crassula</b>	Crassulaceae	ing the growing period but they should be watered sparingly during the resting period. Full sun is necessary for flowering, although some species will grow in semi-shade. They are easy to grow and multiply rapidly by means of cuttings, of the stems or leaves, the cutting should be dried for a while before planting.
Small and curiously formed plants, that are favourites for collectors of succulents. They are grown as pot plants, more for their shape than for their flowers. Crassulas require well-drained soil containing leaf-mould or well-rotted compost and the addition of sand to heavy soil is beneficial. Plenty of water is required during the growing period but they should be watered sparingly during the resting period. Full sun is necessary for flowering, although some species will grow in semi-shade. They are easy to grow and multiply rapidly by means of cuttings, of the stems or leaves, the cutting should be dried for a while before planting.		
<b>Crassula alba</b>	Crassulaceae	Biennial or short lived perennial, dies after fruiting, rosette with spreading leaves spirally arranged, not branched, flowers white tinged with pink to dark red.
<b>Crassula arborescens subsp. undulatifolia</b>	Crassulaceae	Erect, attractive shrubby succulent, smooth grey wavy leaves, flowers white, summer, sun or light shade. Suitable for dry summer-rainfall gardens.
<b>Crassula atropurpurea var. muirii</b>	Crassulaceae	Erect spreading sparingly branched succulent. Flowers white. Suitable for dry rockeries.
<b>Crassula atropurpurea var. watermeyeri</b>	Crassulaceae	Spreading succulent with hairy green leaves, suitable for dry karoo and fynbos gardens, flowers white, summer.
<b>Crassula barklyi</b>	Crassulaceae	Forms small finger-like columns, white flowers, suitable for containers or miniature rockery.
<b>Crassula capitella subsp. thyrsoflora</b>	Crassulaceae	Spreading succulent, leaves in a basal rosette, multiply to form dense groups. Leaves turn red during dry season, flowers white, summer, suitable for containers or well-drained gardens, easily propagated from cuttings, sow in autumn or summer.
<b>Crassula ciliata</b>	Crassulaceae	Branched shrubby succulent, elongated white flowers,

leaves with distinct cilia along margins, sow spring. Suitable for dry winter-rainfall gardens.	
<b>Crassula coccinea</b> Red crassula, Klipblom Robust sparingly branched perennial, bright green leaves, scarlet flowers in summer. Suitable for winter-rainfall gardens or as a pot plant in full sun.	Crassulaceae 300 mm
<b>Crassula cultrata</b> Shrubby perennial, cream flowers in summer, red margin on leaves.	Crassulaceae 300 - 600 mm
<b>Crassula cymosa</b> Small slightly woody branched perennial, creamy yellow flowers, early summer, dry slopes. Suitable for winter rainfall gardens.	Crassulaceae 250 - 350 mm
<b>Crassula deceptor</b> Dwarf, erect compact plant with grey, pointed succulent leaves in a rosette. Flowers white, suitable for pots. Keep dry in summer.	Crassulaceae 40 mm
<b>Crassula dejecta</b> Densely branched leafy shrublet, sprawling, evergreen, numerous white flowers, in summer, sow in spring or summer, good in dry rockeries.	Crassulaceae 400 mm
<b>Crassula ericoides subsp. ericoides</b> Erect small, sparingly branched, succulent with leafy stems, leaves linear, flowers whitish, during mid-summer to autumn, pots and rockeries.	Crassulaceae 150 mm
<b>Crassula expansa subsp. fragilis</b> Brittle-stemmed, sprawling succulent with very small leaves, needs semi-shade. Suitable as a pot plant or ground-cover in dry shady areas.	Crassulaceae 50 - 100 mm
<b>Crassula flanaganii</b> Spreading succulent, green or reddish leaf rosette, white or cream flowers in autumn, suitable for shady subtropical or frost-free gardens.	Crassulaceae 300 mm
<b>Crassula garibina</b> Small branched succulent, small yellowish green flowers. Keep dry in summer, best suited to a dry winter rainfall garden.	Crassulaceae

<b>Crassula lanuginosa var. pachystemon</b>	Crassulaceae
Spreading mat-forming succulent with small hairy leaves, flowers white, summer, suitable for containers or well-drained dry gardens, preferably in light shade, sow in autumn or summer.	
<b>Crassula macowaniana</b>	Crassulaceae
Shrub with spreading branches, suitable for rockery, light shade. Best suited for dry winter rainfall garden.	
<b>Crassula multicava</b>	Crassulaceae
Fairy crassula	
Mat-forming, broad-leaved evergreen perennial, light or deep shade, evergreen, dainty pink flowers in winter-spring, easy to grow, good groundcover under trees.	
<b>Crassula multiflora</b>	Crassulaceae
Shrubby, flat oblong leaves, cream flowers in summer. Suited to dry summer- or winter-rainfall gardens.	
<b>Crassula muscosa</b>	Crassulaceae
Lizards tail, Skilpadbos, Veterbos	
Sprawling perennial, grey scale-like leaves, yellowish green flowers in summer. Suitable for containers or well drained gardens.	
<b>Crassula nudicaulis</b>	Crassulaceae
Bergplakkie	
Low, compact clump-forming perennial, leaf succulent, white flowers, suitable for containers or rockeries in dry summer- or winter-rainfall gardens.	
<b>Crassula orbicularis</b>	Crassulaceae
Spreading succulent with leaves in rosettes. Flowers white. Suitable for well drained rockeries or containers in shade.	
<b>Crassula ovata</b>	Crassulaceae
Jade plant, Kerkei, Plakkies	
Thick-stemmed, evergreen, branched shrub, glossy oval succulent leaves, abundant pink flowers in winter and spring, very hardy, full sun, rockeries or containers.	
<b>Crassula pellucida subsp. marginalis</b>	Crassulaceae
Soft sprawling perennial, pink flowers, suitable for dry shady areas.	

<b>Crassula pelludica subsp. brachypetala</b>	Crassulaceae
Carpet-forming, roots easily at nodes, smooth leaves, white star-like flowers, groundcover for full sun or light shade, subtropical gardens, keep moist in summer.	
<b>Crassula perfoliata var. minor</b>	Crassulaceae
A pleasant branched succulent with thick stalks, fleshy silver-grey leaves and showy red flowers. Suitable for dry gardens or pot culture in full sun.	300 mm
<b>Crassula perfoliata var. perfoliata</b>	Crassulaceae
Sekelplakkie	
Sparsely branched shrublet with interesting grey foliage, white or red flowerheads, during summer.	1 m
<b>Crassula perforata</b>	Crassulaceae
Sosatieplakkie, Inrygertjie.	
Spreading drought resistant plant with grey egg-shaped amplexicaul leaves. Flowers yellowish, small at branch ends. Easily propagated from cuttings. Suitable for containers or dry rockeries in full sun or light shade.	300 mm
<b>Crassula pubescens subsp. radicans</b>	Crassulaceae
Good mat-forming groundcover, rooting where nodes touch the soil, cream flowers, shade. Leaves turn a deep purple red during the dry season. Suitable for dry gardens.	400 mm
<b>Crassula rogersii</b>	Crassulaceae
Spreading shrublet, pale yellow flowers during summer.	200-300 mm
<b>Crassula rubricaulis</b>	Crassulaceae
Spreading, branched shrublet, white flowers, floriferous, suitable for dry rockeries or as a pot plant.	500 mm
<b>Crassula rupestris subsp. marnierana</b>	Crassulaceae
Spreading sparingly-branched succulent with compact crooked leaves. Flowers white, during the autumn. Suitable for well drained winter-rainfall rockeries or containers.	400 mm
<b>Crassula sarcocaulis subsp. rupicola</b>	Crassulaceae
Erect succulent with thick stem, frost resistant, suitable for bonsai subject.	400 mm
<b>Crassula sarcocaulis subsp. sarcocaulis</b>	Crassulaceae
Erect branched dwarf succulent shrublet, with the shape	100 mm

of a miniature tree, bearing tiny leaves, flowers white, erica-like, in profusion, suitable for well drained rockeries or containers and can be trained as a bonsai, frost resistant.

**Crassula scabra**

Crassulaceae

Dwarf branched succulent shrublet, small rough leaves, pink-white flowers. Suitable for dry winter rainfall rockeries.

**Crassula spathulata**

Crassulaceae

Forms a carpet, roots easily at nodes, grows fast, smooth leaves, white flowers, suitable as a groundcover in shady subtropical gardens or as a pot plant, keep moist in summer.

**Crassula subaphylla**

Crassulaceae

Erect, spreading, sparingly branched succulent with brittle leaves, flowers white, autumn, suitable for well-drained dry rockeries or containers, easily propagated from leaf cuttings.

400 mm

**Crassula subulata**

Crassulaceae

Dwarf erect succulent with small hairy leaves and white flowers. Suitable for dry winter-rainfall gardens.

**Crassula tetragona subsp. acutifolia**

Crassulaceae

Carpet forming, spreading shrublet, branched inflorescence of tiny white flowers, sow spring or summer. Suitable as a ground cover in dry summer- or winter-rainfall gardens.

50 mm

**Crassula tetragona subsp. robusta**

Crassulaceae

Small shrubby succulent, linear opposite leaves, flowers greenish yellow or white in summer and autumn, for outdoor rockeries or containers, sow spring or summer.

400 - 500 mm

**Crassula tetragona subsp. tetragona**

Crassulaceae

Erect sparingly-branched succulent. Flowers white, during the autumn. Suitable for well drained rockeries or containers.

400 mm

**Cylindrophylloides dyeri**

Mesemb.

A tufted vygie with cylindrical long leaves and yellowish flowers in spring. Suitable for dry winter-rainfall rockeries and containers. Water

- Cylindrophyllum tugwelliae** Mesemb.  
A tufted vygie with cylindrical long leaves and yellowish flowers in spring. Suitable for dry winter-rainfall rockeries or containers. Water sparingly.
- Cyphostemma bainesii** Vitaceae  
Thickset shrub, yellow peeling bark, summer-growing, deciduous. Thrives well in dry rockeries or containers. 800 mm
- Cyphostemma juttae** Vitaceae  
Tree grape  
Deciduous succulent shrub, huge swollen trunk with yellow-green papery bark, succulent blue-grey leaves, red-purple berries in grape-like bunches in summer, good accent plant, rockeries or pots, well-drained position essential. 1.5 m
- Cyphostemma simulans** Vitaceae  
Tall climber with a succulent base, reddish fruit, small cream flowers. Suitable for dry summer-rainfall rockeries.
- Cyphostemma woodii** Vitaceae  
Erect sparingly branched shrub with annual climbing hairy stems and trifoliate leaves becoming deciduous during late autumn. Flowers on branch ends during summer, green inconspicuous followed by reddish berries. Propagation by seed or cuttings.
- Delosperma** Mesembryanthemaceae  
Solitary to much branched cluster-forming or scrambling leaf succulents rooting at nodes with white, pink yellow or purple flowers usually appearing during spring or summer. The leaves are flat to cylindrical, smooth or hairy. The fruit is a 5-locular capsule without covering membranes. Delosperma are suitable for dry summer and winter rainfall rockeries or containers.
- Delosperma ashtonii** Mesemb.  
Low growing succulent with bright pink flowers, suitable for colder areas or as a pot plant.
- Delosperma laxipetalum** Mesemb.  
Spreading vigorous ground cover, white flowers, suitable for semi-arid regions. 100 mm
- Delosperma luteum** Mesemb.  
Small spreading succulent with yellow flowers. Suitable for dry rockeries.

<b>Delosperma lydenburgense</b>	Mesemb.
Spreading groundcover, linear leaves and lovely deep purple-pink vygie flowers all year.	100 mm
<b>Delosperma minimum</b>	Mesemb.
Spreading groundcover, grey-white leaves, white flowers, suitable for pots or rockeries.	40 mm
<b>Delosperma patersoniae</b>	Mesemb.
Dwarf shrublet, pink flowers in summer, for dry rockeries.	40 mm
<b>Delosperma pottsii</b>	Mesemb.
Dwarf, many branched succulent, flowers white, summer, suitable for dry summer rainfall rockeries or small containers, sow summer.	
<b>Delosperma prasinum</b>	Mesemb.
Small green smooth leaves, purple to white flowers. Suitable for dry rockeries.	
<b>Delosperma pruinsum</b>	Mesemb.
Krimpvarkvygie	
Rounded ground cover, leaves have white bristles, yellow flowers, attractive pot plant. Suitable for dry rockeries.	
<b>Delosperma rogersii</b>	Mesemb.
Flat ground cover, hairy leaves, yellow flowers. Suitable for dry summer-rainfall rockeries.	
<b>Delosperma uncinatum</b>	Mesemb.
Spreading vigorous ground cover, white flowers, suitable for semi-arid regions.	
<b>Dinteranthus inexpectatus</b>	Mesemb.
Dwarf cluster vygie similar to Lithops, resembles a pebble, greyish white leaves. Suitable for containers under controlled conditions.	
<b>Dinteranthus microspermus</b>	Mesemb.
Dwarf clump-forming vygie similar to Lithops, resembles a pebble, greyish white leaves. Suitable for containers under controlled conditions.	
<b>Dinteranthus puberulus</b>	Mesemb.
Dwarf clump-forming vygie similar to Lithops, resembles	

a pebble, greyish white leaves. Suitable for containers under controlled conditions.	
<b>Dinteranthus vanzylii</b> Dwarf clump-forming vygie similar to Lithops, resembles a pebble, greyish white leaves. Suitable for containers under controlled conditions.	Mesemb.
<b>Dinteranthus wilmotianus</b> Dwarf clump-forming vygie similar to Lithops, resembles a pebble, greyish white leaves. Suitable for containers under controlled conditions.	Mesemb.
<b>Dioscorea elephantipes</b> Elephants foot, Hottentotsbrood Large fleshy caudex resembles a tortoise shell. Branched, slender twining stems; broad, heart-shaped leaves and creamy white flowers, in summer, flat seeds in triangular seed capsule. Suitable for dry rockeries or containers in a shady position.	Dioscoreaceae  0.6 - 1 m
<b>Dioscorea hemicrypta</b> Attractive succulent caudex (stem base), twining branches, grey leaves, suitable for rockeries and containers, water sparingly in winter and summer.	Dioscoreaceae
<b>Dioscorea sylvatica</b> Elephants foot, Hottentotsbrood Succulent with tortoise shell-like trunk, up to 500 mm in diameter, grey-green leaves, become smaller during early autumn, flowers white, inconspicuous, early autumn, suitable for dry, well-drained gardens or containers, water sparingly, sow in winter.	Dioscoreaceae

## Vygies, Mesembs

The vygie family or Mesembryanthemaceae is the world's largest succulent plant family and few people realise that almost 95% of its members are endemic to South Africa, especially to the semi-arid winter rainfall regions of the Cape. The vygies are one of the world's most colourful plant groups and are today cultivated world-wide.

They vary from the highly succulent dwarf "stone plants" to shrubs 2,5 m tall. The leaves are very variable, ranging from terete to flat.

Their glittering petals and hygrochastic fruiting capsules are characteristic of the family. Fruiting capsules will open only with rain to release seeds which are flushed out by raindrops, and will close

again with the onset of drier conditions.

The main flowering season is in the early spring (August) when *Dorotheanthus bellidiformis*, species of *Jordaaniella* and *Cephalophyllum*, and *Lampranthus amoenus* come into flower. These are later replaced by *Lampranthus roseus* and *Drosanthemum speciosum*. The mesems are especially striking when the plants are in flower, with colours such as purple, pink, red, white and yellow.

Mesemb. are easily propagated from cuttings or seed. The cuttings at Kirstenbosch are made after fruiting time,

in midsummer. Cuttings 10 cm long are ideal. Planted in clean river sand, they root within three weeks. After two months the cuttings can be planted out to suitable sites. Cuttings can also be planted in situ and kept moist until well rooted. During the wet winter months, plants are liable to fungus attack, but this is easily controlled with a fungicide. Seeds can be sown in sandy, well drained soil and covered with a thin layer of sand. Germination is within three weeks.

**Drosanthemum bellum**

Cushion plant, pink and white vygie flowers in spring, rockeries in dry winter-rainfall gardens.

Mesemb.  
200 mm

**Drosanthemum bicolor**

Bushy upright shrublet, dark red vygie flowers with golden yellow centres, spring, sunny dry rockeries.

Mesemb.  
300 - 600 mm

**Drosanthemum floribundum**

Low growing, spreading cushion-forming shrublet, floriferous, pale or deep pink flowers in spring. Dry rockeries.

Mesemb.  
50 mm

**Drosanthemum hispidum**

Procumbent, leaves with papillae, many purple flowers in spring. Good ground-cover for dry karoo regions.

Mesemb.  
50 mm

**Drosanthemum micans**

Freely branched shrub, crystalline leaves, yellow and purple vygie flowers, in spring, sunny rockeries in dry karoo regions.

Mesemb.  
600 mm

**Drosanthemum speciosum**

Bergvygie

Rounded spreading shrublet, showy yellow, red or orange flowers in spring. Suitable for sunny dry gardens.

Mesemb.  
600 mm

**Drosanthemum striatum**

Porseleinbos, Vleisbos

Spreading fast-growing ground cover, covered with pink-mauve vygie flowers during spring, sunny rockeries.

Mesemb.  
200 mm

## **Drosanthemum thudichumii**

Bushy, flowers white or yellowish, spring. Suitable for dry sunny rockeries.

Mesemb.  
1 m

## **Drosanthemum tuberculiferum**

Prostrate shrublet, pink 'vygie' flowers in spring. Suitable for dry sunny rockeries.

Mesemb.  
120 mm

## **Eberlanzia spinosa**

A long-lived thorny dwarf shrub that resprouts. Succulent leaves and purplish-pink 'vygie' flowers in summer. Suitable for dry summer-rainfall rockeries.

Mesemb.  
300 mm

## **Erepsia anceps**

Small upright shrub, pink vygie flowers, suitable addition to fynbos gardens, sow autumn.

Mesemb.  
100 - 250 mm

## **Euphorbia**

**Euphorbiaceae**

### **Noors or euphorbia plants**

The *Euphorbia* family is very prominently represented in Africa, especially in the semi-arid regions of South Africa where 210 succulent species occur. They are mainly stem succulents, with small leaves on the young growth which quickly wither and drop away. The flowers are small and yellow, succeeded by trilocular capsules which explosively release their seeds. The milky latex, which is usually toxic, is characteristic. Euphorbias are especially common in the warmer low-lying south-eastern regions of South Africa. In some parts of the eastern Cape they form the dominant vegetation, called Noorsveld. The Noorsveld species are non-toxic to livestock and are valuable fodder plants, especially during times of drought.

Euphorbias vary from the large *E. ingens* (ingens = large), *E. tirucalli* and *E. triangularis* to the smaller species such as *Euphorbia polygona*, *E. clandestina*,

*E. atrispina* and *E. clava*. Some are dwarf plants with subterranean tubers, for example *E. tuberosa*. *Euphorbia mauritanica* is a quick-growing (finger-branched) shrub and prominently used in the rockery. Its life span is 4-8 years. One of the small mistletoe species (*Viscum minimum*) is a hemi-parasite on *Euphorbia polygona*.

*Euphorbia* species are easily propagated from cuttings or seed planted in a sandy, well drained soil mixture. Cuttings should first be allowed to dry off for at least two weeks before planting. They can then be planted in clean river sand and should be kept moist until well rooted before they are transplanted to their permanent site. Seeds must be planted in well drained soil, covered with a thin layer of sand and placed in a warm position. Germination occurs after about three to four weeks. Care should be taken with the milky latex as it causes serious eye irritation or damage when sap enters the eye.

<b>Euphorbia burmannii</b> Steenbokmelkbos.	Euphorbiaceae
Succulent stems, eaten by goats and sheep, dark reddish glands marking the nodes. Suitable for dry winter rainfall and coastal gardens.	300-700mm
<b>Euphorbia caput-medusae</b>	Euphorbiaceae
Clump-forming stem succulent with a thick upright central stem and flat growing side branches. Suitable for difficult dry windy coastal gardens and as a container plant. Keep dry in summer.	
<b>Euphorbia clava</b> Pynappelhoors	Euphorbiaceae
Swollen cylindrical stems, persistent leaves, greenish flowers. Suitable for dry summer-rainfall gardens.	1 m
<b>Euphorbia enopla</b>	Euphorbiaceae
Large succulent with a tufted habit, freely branched with large erect, cylindrical stems and small yellow flowers. Suitable for dry karoo gardens and containers. Water sparingly.	600mm
<b>Euphorbia horrida var. horrida</b>	Euphorbiaceae
Forms cactus-like clumps, very handsome grey plant with waxy conspicuously striped angles, reddish regular short spines and small yellow flowers. Suitable for dry karoo gardens and containers. Water sparingly in summer.	1m
<b>Euphorbia obesa</b> Vetmensie, Zoeloe-hutjie	Euphorbiaceae
Single stemmed attractive succulent, suitable for containers, keep dry in winter, water in late summer and autumn. Best with ample shade.	50 mm
<b>Euphorbia pentagona</b>	Euphorbiaceae
Rounded much-branched, shrubby, thorny succulent up to 1 m high, small yellow flowers, suitable for dry karoo gardens or containers, sow during summer or autumn, easily propagated from cuttings, water sparingly during summer.	
<b>Euphorbia schoenlandii</b>	Euphorbiaceae
Thick single trunked plant with milky latex and spikes on stem, best grown in a pot. Keep dry in summer.	100 - 500 mm

- Faucaria albidens** Mesemb.  
Dwarf branched rosette succulent forming clusters, yellow vygie flowers in autumn, best in containers, sow spring or summer.
- Faucaria bosscheana** Mesemb.  
Tierbekvygie  
Dwarf clump forming vygie, summer growing, leaves jaw-like, yellow flowers in autumn, sow summer or autumn. Suitable for a dry summer-rainfall garden or make a good pot plant, in sun or partial shade.
- Faucaria britteniae** Mesemb.  
Tufted small succulent, attractive toothed grey leaves, large yellow flowers, autumn, containers or dry summer rainfall gardens in sun or partial shade. Sow summer or autumn.
- Faucaria felina** Mesemb.  
Tufted small succulent with attractive toothed grey leaves, yellow flowers, autumn, suitable for containers or dry summer rainfall gardens in sun or partial shade.
- Faucaria hooleae** Mesemb.  
Tufted small succulent (smallest in genus) with attractive toothed leaves and large yellow flowers appearing during the autumn, suitable for containers or dry summer rainfall gardens in sun or partial shade. Sow summer or autumn.
- Faucaria sub-integra** Mesemb.  
Dwarf clump forming vygie, attractive toothed leaves, large yellow flowers, autumn, containers or dry summer rainfall gardens, sow summer or autumn.
- Faucaria tigrina** Mesemb.  
Dwarf vygie species with attractive toothed grey leaves and yellow flowers in autumn, suitable for containers and dry rockeries in sun or partial shade. propagate easily from seed or division.
- Faucaria tuberculosa** Mesemb.  
Dwarf cluster forming vygie, toothed fleshy leaves with tubercles on leaves yellow flowers, warm dry areas. In full sun or partial shade, good for containers.

## **Fenestraria aurantiaca**

Mesemb.

Cluster forming succulent leaved plant bearing club-shaped leaves. Flowers pink in winter and spring. Needs sandy soil, full sun or partial shade, keep dry in summer, suitable for containers.

## **Fenestraria rhopalophylla**

Mesemb.

Tufted vygie with club-shaped leaves and yellowish flowers, keep dry during summer, suitable for containers in sandy soil.

## **Fockea edulis**

Asclepiadaceae

Climbing plant with succulent caudex, flowers small, purplish, containers or dry bushveld gardens, water sparingly in summer.

## **Gasteria**

Asphodelaceae

Plants are solitary or cluster-forming, varying in size from dwarf cluster-forming plants to large solitary rosettes. The succulent leaves are mottled, smooth or tuberculate (with knobby projections), arranged in a rosette or standing in two rows. The leaves are triangular-lanceolate or strap-shaped, brittle with white tubercles on margin. The flowers are

tubular and bulging (gasteriform) at the base, red-pink with greenish tips, borne on single or branched spikes in spring and summer, pollinated by sunbirds. Keep in a shaded position, suitable for containers as indoor or outdoor plants, resistant to moderate frost. Easily propagated from division, leaf-cuttings or seed.

## **Gasteria acinacifolia**

Asphodelaceae

Erect mottled leaves in a rosette, tall flower-spike of pink flowers in spring.

600 mm

## **Gasteria batesiana**

Asphodelaceae

Forms a dense group with dark rough leaves in a rosette, spring flowering. Best as a pot plant in shade.

## **Gasteria baylissiana**

Asphodelaceae

Dwarf, rough distichous leaves and orange and red flowers, rare. Best as pot plants in shade.

## **Gasteria bicolor**

Asphodelaceae

Bontbessie

Rosette, or opposite leaves on short stem, flowers pink during spring. Suitable for a shady position in a pot or rockery.

- Gasteria bicolor var. bicolor** Asphodelaceae  
 Bontbessie  
 Rosette or opposite leaves on short stem, pink pendulous flowers in spring.
- Gasteria bicolor var. liliputana** Asphodelaceae  
 Dwarf, attractive mottled leaves in a rosette, flowers pink in spring. Best as a pot plant in shade.
- Gasteria brachyphylla** Asphodelaceae  
 Attractive mottled leaves, inflorescence branched, flowers in spring or summer. Best as a pot plant in shade.
- Gasteria brachyphylla var. bayeri** Asphodelaceae  
 Dwarf clump-forming succulent, attractive mottled distichous leaves, inflorescence simple. Flowers in spring. Keep in partial shade.
- Gasteria carinata** Asphodelaceae  
 Stemless rosette proliferates to form groups, triangular spotted leaves. Flowers in winter and spring. Keep in partial shade.  
 120 - 150 mm
- Gasteria carinata var. verrucosa** Asphodelaceae  
 Rough opposite leaves. Flowers in spring. Best in containers, keep in partial shade.
- Gasteria croucheri** Asphodelaceae  
 Aloe-like succulent with mottled leaves in a rosette, suitable for difficult coastal gardens, rockeries or containers in partial shade.  
 500 - 600 mm
- Gasteria disticha** Asphodelaceae  
 Stemless, thick warty strap-shaped leaves in opposite rows, red flowers in spring. Keep in a dry rockery or container in partial shade.  
 200 - 250 mm
- Gasteria ellaphieae** Asphodelaceae  
 Dwarf clump-forming succulent, attractive tuberculate leaves in a small rosette. Flowers in summer. Keep in partial shade.
- Gasteria excelsa** Asphodelaceae  
 Aloe-like rosette-forming succulent, leaves mottled with sharp margin, flowers in summer.  
 100 - 150 mm

<b>Gasteria glomerata</b>	Asphodelaceae
Dwarf cluster-forming succulent, attractive grey tuberculate leaves in opposite rows and reddish-pink flowers in spring. Best as a pot plant in a shady position.	
<b>Gasteria nitida var. armstrongii</b>	Asphodelaceae
Dwarf clump-forming succulent, attractive tuberculate leaves in opposite rows, flowers in summer. Best for shady regions.	
<b>Gasteria nitida var. nitida</b>	Asphodelaceae
Dwarf clump-forming succulent, attractive smooth leaves in a small rosette. Best as a pot plant in semi-shade.	
<b>Gasteria pillansii var pillansii</b>	Asphodelaceae
Stemless clump-forming succulent, thick mottled distichous leaves. Flowers during midsummer.	
<b>Gasteria pillansii var. ernesti-ruschii</b>	Asphodelaceae
Dwarf, attractive mottled leaves in opposite rows, plants form dense groups. Flowers during mid-summer and autumn. Best as a pot plant, keep dry in summer.	
<b>Gasteria pulchra</b>	Asphodelaceae
Tapering mottled leaves in a rosette, low-growing or stemless. Best in partial shade in dry rockeries.	
<b>Gasteria rawlinsonii</b>	Asphodelaceae
Cluster forming, producing long leafy stems. Flower red-pink in spring. Best in partial shade.	
<b>Gasteria vlokii</b>	Asphodelaceae
Dwarf clump-forming succulent, attractive mottled leaves in a small rosette. Flowers in mid-summer. Best suited as a pot plant.	
<b>Gerrardanthus macrorhizus</b>	Cucurbitaceae
Caudiciform, large above ground tuber, climbs with tendrils, ivy-like leaves, small flowers, male and female on separate plants, summer rainfall regions, suitable for large containers, grow in light shade.	
<b>Gibbaeum album</b>	Mesemb. 20 - 25 mm
Highly succulent plant, greyish-white united ovoid leaf pairs, white flowers, grow in pots in glasshouse, water sparingly in winter and summer.	

<b>Gibbaeum angulipes</b>	Mesemb.
Prostrate mat-forming creeper, flowers pink. For dry rockeries or containers.	20 - 30 mm
<b>Gibbaeum austricolum</b>	Mesemb.
Dwarf cluster-forming succulent, attractive spreading hairy leaves, flowers purplish, spring and early summer, best cultivated in containers, preferably in a green-house, water sparingly winter and summer.	
<b>Gibbaeum dispar</b>	Mesemb.
Dwarf, compact, stemless, magenta vygie flowers, pot culture in glasshouse, water sparingly in winter and summer.	
<b>Gibbaeum gibbosum</b>	Mesemb.
Stemless cluster-forming succulent, leave tapering, flowers magenta. Best for containers, water sparingly.	
<b>Gibbaeum heathii</b>	Mesemb.
Low-growing with very fat grey-green leaves, pink to white flowers, pots or miniature rockeries, water sparingly.	20 - 30 mm
<b>Gibbaeum pachypodium</b>	Mesemb.
Cushion-forming acaulescent succulent, leaves hairy, flowers pink, shale slopes and flats. Suitable for containers and rockeries in dry karoo gardens.	
<b>Gibbaeum petrense</b>	Mesemb.
Mimicry plant.	
Dwarf mat-forming succulent, leaves grey-green and flowers magenta. Suitable for containers and rockeries in dry karoo gardens.	9 - 10 mm
<b>Gibbaeum pubescens subsp. shandii</b>	Mesemb.
Cluster forming, felty highly succulent leaves, reddish flowers, pot culture under glasshouse conditions, water sparingly.	20 - 30 mm
<b>Gibbaeum velutinum</b>	Mesemb.
Unequal leaf pairs, grey-green, large pale pink flowers, pot culture under glasshouse conditions, water sparingly.	50 - 60 mm

## **Glottiphyllum**      Mesembryanthemaceae

Tufted leaf succulents with prostrate to decumbent (bending upwards from a prostrate base) stems rooting at nodes. The leaves are soft, smooth, oblong and tongue-shaped. The flowers are yellow

mesem-flowers. The fruit is a multilocular capsule. They are best cultivated as a ground-cover on steep embankments or as container plants, preferably in a greenhouse, water sparingly.

### **Glottiphyllum depressum**

Mesemb.

Smooth tongue-shaped leaves, large yellow flowers up to 60 mm in diameter. Best for dry rockeries or in containers.

### **Glottiphyllum difforme**

Mesemb.

Cluster forming, long smooth cylindrical leaves, yellow flowers, best for dry rockeries or pot culture.

### **Glottiphyllum herrei**

Mesemb.

Bluish-green leaves, large yellow scented flowers. Best for dry rockeries or containers.

6 mm

### **Glottiphyllum linguiforme**

Mesemb.

Pale green leaves with dark translucent dots. Flowers yellow. Best for dry rockeries or container.

### **Glottiphyllum longum**

Mesemb.

Mat forming, oblong opposite leaves, flowers yellow in summer. Good ground cover for dry steep embankments.

### **Glottiphyllum nelii**

Mesemb.

Leaves opalescent, greyish-green, apex recurved, flowers yellow. Best in containers under controlled conditions.

40 - 500 mm

### **Glottiphyllum oligocarpum**

Mesemb.

Clump-forming grey-green leaves, large yellow flower. Best for containers or dry rockeries.

40 - 45 mm

### **Glottiphyllum regium**

Mesemb.

Erect, thick leaves, yellow flowers in winter. Water sparingly.

25 - 100 mm

### **Glottiphyllum surrectum**

Mesemb.

Low clumps, large yellow glossy flowers.

30 - 40 mm

## Haworthia

Asphodelaceae

Plants are solitary or cluster-forming, with soft mottled succulent leaves in a rosette or rarely with leaves standing in two rows. The leaves may be triangular-lanceolate or linear, tuberculate (with knobby projections) or smooth and with a

toothed or entire margin. The flowers are small, white and tubular, borne on a spike mainly during spring and summer. Keep the plants in a shaded position, suitable for containers as indoor or outdoor plants, resistant to moderate frost.

### Haworthia angustifolia

Asphodelaceae

Dwarf tufted succulent with leaves in a rosette, proliferating from base to form dense groups.

### Haworthia angustifolia forma baylisii

Asphodelaceae

Purple-green leaves in a rosette, proliferate to form dense clusters.

### Haworthia attenuata

Asphodelaceae

Cluster-forming, miniature aloe-like rosettes of narrow zebra striped leaves, light sandy soil. Best in half shade or dry rockeries. Thrives well in containers.

### Haworthia bolusii var. blackbeardiana

Asphodelaceae

Dwarf, compact succulent, leaves in attractive rosette. Best in partial shade as a pot plant.

### Haworthia chloracantha var. chloracantha

Asphodelaceae

Dwarf tufted succulent with leaves in a rosette. Plants proliferate to form dense groups.

### Haworthia chloracantha var. subglauca

Asphodelaceae

Dwarf tufted succulent with glaucous leaves in a rosette. Plants proliferate to form dense groups.

### Haworthia coarctata

Asphodelaceae

Dwarf tufted succulent with spreading leafy branches bearing attractive white-tubercled leaves.

### Haworthia coarctata var. adelaidensis

Asphodelaceae

Small stemless rosette of narrow leaves.

### Haworthia coarctata var. coarctata forma tenuis

Asphodelaceae

Attractive short leafy succulent stems with leaves in a rosette.

### Haworthia cooperi var. cooperi

Asphodelaceae

Rosettes of very fleshy, bluish-green transparent-tipped leaves.

<b>Haworthia cooperi var. leightonii</b>	Asphodelaceae
Small compact succulent, forms dense clusters of transparent leaves. Best suited to containers in partial shade.	
<b>Haworthia cymbiformis var. cymbiformis</b>	Asphodelaceae
Stemless cluster succulent with small rosette of pale green leaves, proliferates to form dense clusters. Best suited to containers in partial shade.	
<b>Haworthia cymbiformis var. cymbiformis forma</b>	Asphodelaceae
Clusters of small rosettes of pale green leaves, proliferates to form dense clusters. Best suited to containers in partial shade.	
<b>Haworthia cymbiformis var. umbraticola</b>	Asphodelaceae
Boat-shaped leaves, in a rosette, plants proliferate to form dense groups. Best suited to containers in partial shade.	
<b>Haworthia fasciata</b>	Asphodelaceae
Rosette-forming, leaves zebra marked, shade, good pot subject.	
<b>Haworthia glabrata</b>	Asphodelaceae
Compact clump-forming, leaves in rosettes. Best suited to containers in partial shade.	
<b>Haworthia glauca var. glauca</b>	Asphodelaceae
Dwarf tufted succulent with attractive acuminate grey-green leaves in a rosette. Best suited to containers in partial shade.	
<b>Haworthia glauca var. herrei</b>	Asphodelaceae
Small compact clump forming succulent. Leaves in rosette. Best suited to containers in partial shade.	
<b>Haworthia herbacea</b>	Asphodelaceae
Dwarf tufted succulent with leaves in a attractive rosette. Plants proliferate to form dense groups. Best suited to containers in partial shade.	
<b>Haworthia limifolia</b>	Asphodelaceae
Dwarf cluster forming succulent with attractive leaves in a rosette, plants proliferate to form dense groups. Best suited to containers in partial shade.	

<b>Haworthia longiana</b>	Asphodelaceae
Attractive acuminate leaves in a rosette. Best suited to containers in partial shade.	
<b>Haworthia magnifica var. maraisii</b>	Asphodelaceae
Retuse leaves in a attractive rosette. Plants proliferate to form dense groups. Best suited to containers in partial shade.	
<b>Haworthia marumiana</b>	Asphodelaceae
Dwarf, compact, dense clusters. Best suited to containers in partial shade.	
<b>Haworthia nigra</b>	Asphodelaceae
Small rosette of rough leaves. Best suited to containers in partial shade.	
<b>Haworthia pumila</b>	Asphodelaceae
Vratjiesaalwee.	
Leaves brown to green with large whitish to brown tubercles, rosettes solitary. Best suited to containers outside the karoo, keep in partial shade.	300mm
<b>Haworthia radula</b>	Asphodelaceae
Cluster forming plants with leaves in a rosette. Leaves green, densely covered with minute white tubercles, slender and nearly erect.	
<b>Haworthia reinwardtii</b>	Asphodelaceae
Small compact clump-forming, leaves in an elongated rosette. Best suited to containers in partial shade.	
<b>Haworthia reticulata</b>	Asphodelaceae
Dwarf aloe-like plant, leaves densely crowded. Best suited to containers in partial shade.	
<b>Haworthia retusa</b>	Asphodelaceae
Small rosettes of very thick succulent leaves. Best suited to containers in partial shade.	
<b>Haworthia scabra var. scabra</b>	Asphodelaceae
Scabrous leaves in a attractive rosette. Plants proliferate to form dense groups. Best suited to containers in partial shade.	
<b>Haworthia translucens subsp. tenera</b>	Asphodelaceae
Succulent with small translucent hairy rosettes. Best suited to containers in partial shade.	

**Haworthia truncata**

Asphodelaceae

Perdetande.

Attractive oblong leaves in opposite rows. Leaves hard truncate at their tips and translucent. Plants proliferate from the base to form dense groups. Best suited to containers in partial shade.

**Haworthia turgida**

Asphodelaceae

A very small, stemless rosette of fleshy leaves. Best suited to containers in partial shade.

**Haworthia venosa**

Asphodelaceae

Dwarf tufted succulent with leaves in a attractive rosette, plants proliferate to form dense groups. Best suited to containers in partial shade.

**Haworthia venosa subsp. tessellata**

Asphodelaceae

Small stemless rosette of attractive veined leaves. Best suited to containers in partial shade.

**Haworthia viscosa**

Asphodelaceae

Attractive leaves in three ranks, dense clusters. Best suited to containers in partial shade.

**Hereroa calycina**

Mesemb.

Dwarf acaulescent succulent plant with bluish leaves with green spots, flowers yellow. Best in dry rockeries in full sun or in containers water sparingly.

**Hereroa fimbriata**

Mesemb.

Pale yellow evening flowers, rockeries. Best in dry rockeries in full sun or in containers water sparingly.

**Hereroa teretifolia**

Mesemb.

Dwarf, erect succulent with terete leaves, yellow vygie flowers, summer, containers or dry well-drained rockeries, sow summer or winter. Best in dry rockeries in full sun or in containers water sparingly.

**Hereroa tugwelliae**

Mesemb.

Small succulent, grey-green flat leaves, yellow flowers, container, water sparingly in summer and winter. Best in dry rockeries in full sun or in containers water sparingly.

**Huernia sp.**

Asclepiadaceae

A clump forming dwarf succulent with spreading fat four-sided stems. Flowers small, maroon with yellow

speckles, tubular with five lobes. Suitable for containers or dry summer or winter rainfall rockeries, in shady areas.

**Hymenogyne glabra**

Dwarf, annual with white vygie flowers in spring. Best in dry rockeries in full sun or in containers water sparingly.

Mesemb.  
100 mm

**Jordaaniella clavifolia**

A mat-forming succulent, suitable as a groundcover for dry winter rainfall gardens. Leaves cylindrical, club-shaped, ascending. Flowers orange-yellow.

Mesemb.

**Jordaaniella cuprea**

Decumbent matforming succulent suitable as ground cover for dry winter rainfall gardens, leaves cylindrical, ascending, flowers orange-yellow.

Mesemb.

**Jordaaniella dubia**

Mat-forming plants with grey-green leaves, large yellow or salmon-pink flowers in spring, roots at nodes.

Mesemb.  
100 mm

**Kalanchoe brachyloba**

Upright succulent herb, attractive leaves in rosette, inflorescence erect, flowers yellowish-green, for containers or dry rockeries, sow summer.

Crassulaceae

**Kalanchoe crundallii**

Fleshy, upright branched succulent with opposite green to purplish leaves, the inflorescence a short cymose panicle, the flower coral-red. Suitable for sub-tropical gardens and containers.

Crassulaceae  
800mm

**Kalanchoe longiflora**

Small shrubby succulent, attractive grey leaves, yellow flowers, dry subtropical rockeries.

Crassulaceae

**Kalanchoe paniculata**

Leaf succulent bearing large green leaves with a reddish margin and erect yellowish flowers during summer. Suitable for summer-rainfall gardens.

Crassulaceae

**Kalanchoe rotundifolia**

Erect succulent with round leaves and red flowers, suitable for container or dry rockeries in shade.

Crassulaceae

<b>Kalanchoe thyrsiflora</b>		Crassulaceae
Powdery white large leaves, yellow flowers. Plants die after flowering. Suitable for summer-rainfall gardens.		
<b>Kedrostis nana</b>		Cucurbitaceae
Caudiform, grey potato-like caudex, green twining branches, suitable for containers, keep dry in summer, sun or shade.		
<b>Kleinia stapeliiformis</b>		Asteraceae
Stoloniferous, decumbent, succulent stems, red flowers, for containers and rockeries, keep dry in winter.		200 mm
<b>Lampranthus</b>	<b>Mesembryanthemaceae</b>	
'Sonygies'.		
Much branched rounded shrublets, rarely cluster-forming or scrambling leaf succulents rooting at nodes. The white, pink, yellow or purple flowers usually		
		appearing during spring or summer. The leaves are cylindrical to three sided, and smooth. The fruit is a 5-locular capsule with covering membranes. Suitable for dry summer and winter rainfall rockeries or containers.
<b>Lampranthus amoenus</b>		Mesemb.
Shrubby mesem, magenta flowers in September, for dry rockeries.		1 m
<b>Lampranthus aureus</b>		Mesemb.
Very showy, spring-flowering, flowers orange, yellow or white, for dry rockeries and strandveld gardens.		300 mm
<b>Lampranthus bicolor</b>		Mesemb.
Dwarf, erect succulent shrub, yellow flowers in summer. Best suited to fynbos gardens.		
<b>Lampranthus blandus</b>		Mesemb.
Vigorous, spreading, magenta flowers in October. Best suited to fynbos gardens.		200 mm
<b>Lampranthus caulescens</b>		Mesemb.
Sprawling succulent herb, with glaucous blue-green leaves. Flowers pink or white, appearing during spring. Best suited to fynbos gardens.		300mm
<b>Lampranthus compressus</b>		Mesemb.
Flattened grey-green leaves, flowers pink. Best suited to fynbos gardens.		300 mm

<b>Lampranthus copiosus</b>	Mesemb. 200 - 300 mm
Spreading shrublet, good groundcover for sunny areas, pink flowers in early summer. Best suited to fynbos gardens.	
<b>Lampranthus curvifolius</b>	Mesemb. 200mm
Small vygie, pink flowers in spring, winter rainfall region. Best suited to fynbos garden.	
<b>Lampranthus deltoides</b>	Mesemb. 200-350mm
Spreading shrublet with dentate leaves, pink vygie flowers in summer, suitable addition to fynbos gardens.	
<b>Lampranthus explanatus</b>	Mesemb.
Spreading, mat-forming succulent, terete leaves, flowers yellow, spring, for dry sandy difficult coastal gardens.	
<b>Lampranthus multiradiatus</b>	Mesemb. 300 mm
Low-growing, free-flowering, shades of mauve, pink and white, spring, recommended, replace after 3 years.	
<b>Lampranthus piquetbergensis</b>	Mesemb. 300 mm
Small roundish entire grey-green leaves, flowers pink. Best suited to fynbos gardens.	
<b>Lampranthus primiversus</b>	Mesemb. 300 mm
Bushy shrublet, pink flowers in September. Best suited to fynbos gardens.	
<b>Lampranthus roseus</b>	Mesemb. 300mm
Spreading branched floriferous shrub, flowers purple or pink, summer. Best suited to fynbos gardens.	
<b>Lampranthus sociorum</b>	Mesemb. 100 mm
Mat forming succulent, flowers white to magenta with dark centre, spring to early summer. Best suited to fynbos gardens.	
<b>Lampranthus spectabilis</b>	Mesemb. 200 mm
Low and spreading, magenta flowers in October, for dry rockeries.	
<b>Lampranthus tegens</b>	Mesemb.
Procumbent mat-forming succulent, pink flowers, suitable for rockeries in fynbos regions.	

<b>Lapidaria margaretae</b>	Mesemb.
Dwarf tufted succulent with attractive club-shaped grey-green leaves, flowers yellow, best in containers in a green-house, water sparingly winter and summer.	
<b>Lithops</b>	Mesembryanthemaceae
Dwarf succulent with rounded mottled leaves resembling a pebble. Best in	containers, keep dry in winter and early summer, grow in good light out of direct sun. Sow in spring.
<b>Lithops aucampiae</b>	Mesemb.
Large yellow flowers in autumn.	
<b>Lithops bromfieldii</b>	Mesemb.
Yellow flowers in autumn.	
<b>Lithops dinteri</b>	Mesemb.
Yellow flowers in autumn.	
<b>Lithops divergens</b>	Mesemb.
Flowers yellow with white centres, autumn.	
<b>Lithops francisci</b>	Mesemb.
Small yellow flowers in autumn.	
<b>Lithops fulviceps</b>	Mesemb.
Flowers yellow, autumn.	
<b>Lithops gesinae</b>	Mesemb.
Large yellow flowers, autumn.	
<b>Lithops geyeri</b>	Mesemb.
Flowers yellow, often with white centres, autumn.	
<b>Lithops gracilidelineata subsp. gracilidelineata var.</b>	Mesemb.
Large yellow flowers, autumn.	
<b>Lithops hallii</b>	Mesemb.
Large white flowers, autumn.	
<b>Lithops helmutii</b>	Mesemb.
Flowers yellow with white centre, autumn.	
<b>Lithops herrei</b>	Mesemb.
Flowers small yellow, occasionally bronze-yellow, with white centres.	
<b>Lithops hookeri</b>	Mesemb.
Yellow flowers in autumn.	

<b>Lithops julii</b>	Mesemb.
Large white flowers, autumn.	
<b>Lithops karasmontana</b>	Mesemb.
Large white flowers, autumn.	
<b>Lithops lesliei</b>	Mesemb.
Large yellow flowers, autumn.	
<b>Lithops marmorata</b>	Mesemb.
Large white flowers.	
<b>Lithops meyeri</b>	Mesemb.
Flowers yellow with white centre, autumn.	
<b>Lithops naureeniae</b>	Mesemb.
Flowers shiny yellow with white centres, autumn.	
<b>Lithops olivacea var. olivacea</b>	Mesemb.
Flowers yellow with white centres, autumn.	
<b>Lithops optica</b>	Mesemb.
Flowers white often with pink tips, autumn.	
<b>Lithops optica 'Rubra'</b>	Mesemb.
Flowers white, often suffused with pink.	
<b>Lithops otzeniana</b>	Mesemb.
Flowers yellow with white centres.	
<b>Lithops pseudotruncatella</b>	Mesemb.
Large yellow flowers.	
<b>Lithops ruschiorum var. ruschiorum</b>	Mesemb.
Yellow flowers.	
<b>Lithops salicola</b>	Mesemb.
Flowers white, autumn.	
<b>Lithops schwantesii</b>	Mesemb.
Flowers yellow, autumn.	
<b>Lithops terricolor</b>	Mesemb.
Flowers yellow, sometimes with white centres, autumn.	
<b>Lithops verruculosa var. verruculosa</b>	Mesemb.
Flowers variable in colour, mostly shades of yellow, but occasionally dark pink, pink or white, autumn.	

<b>Lithops villetii subsp. villettii</b>	Mesemb.
Flowers white, autumn.	
<b>Machairophyllum albidum</b>	Mesemb.
Stemless, clump forming succulent, whitish leaves, flowers yellow with reddish reverse, nocturnal, in summer.	
<b>Machairophyllum stayneri</b>	Mesemb.
Clump forming succulent, blue-grey leaves, yellow vygie flowers with darker reverse, summer.	
<b>Marlothistella uniondalensis</b>	Apiaceae
Plants dwarf tufted. Leaves linear, tapering. Flowers yellow. Suitable for containers.	
<b>Mesembryanthemum crystallinum</b>	Mesemb.
Ice plant, Brakslaai, Slaaibos	
Biennial, spreading, translucent papillae on leaves, yellow-white flowers in summer, sow in winter. Dry sunny garden.	100 mm
<b>Mitrophyllum clivorum</b>	Mesemb.
Small shrub, pink flowers, winter growing, keep dry during summer.	300mm
<b>Nananthus aloides var. aloides</b>	Mesemb.
Attractive dwarf succulent with large tubers and a rosette of leaves flat on the ground. Large yellow flowers in spring. Suitable for containers and dry rockeries.	
<b>Odontophorus angustifolius</b>	Mesemb.
Cluster forming stemless, pale yellow flowers, keep dry in summer, best in greenhouse.	
<b>Odontophorus marlothii</b>	Mesemb.
Shrubby, lemon-yellow flowers, keep dry in summer, best in greenhouse.	300 mm
<b>Odontophorus nanus</b>	Mesemb.
Small compact tufted plant, yellow flowers, suitable for pots, keep dry in summer.	

<b>Oophytum</b>	<b>Mesembryanthemaceae</b>	The plant divides to form small clusters. The flowers are pink, yellow or white appearing during autumn. Suitable for containers, keep dry during summer.
Dwarf tufted plants, the leaf pairs are fused to form an oval succulent body.		
<b>Oophytum nanum</b>		Mesemb.
Dwarf cluster forming succulent, flowers purplish, keep dry in summer, best in greenhouse.		
<b>Oophytum oviforme</b>		Mesemb.
Dwarf cluster forming succulent, flowers purplish, keep dry in summer, best in greenhouse.		
<b>Ophthalmophyllum herrei</b>		Mesemb.
Dwarf succulent with rounded leaves resembling a pebble, flowers white, autumn, best in containers, in a greenhouse, keep dry winter and early summer.		
<b>Orbea variegata</b>		Asclepiadaceae
Carrion flower, Aasblom		
Mat-forming succulent, toothed stems, flowers yellow with maroon spots, late summer, for containers and rockeries.		60-150mm
<b>Petopentia natalensis</b>		Periplocaceae
A vine, with opposite leaves that are purple underneath, a grey potato-like tuber above the ground that can be up to 200mm in diameter. Suitable for subtropical gardens and containers. Propagate from seed sown in summer.		
<b>Phyllobolus sp. (Aridaria sp.)</b>		Mesemb.
A widespread, branched succulent with a fleshy rootstock and soft branches. The nocturnal flowers are yellow, cream, white, pink or red. Suitable for a dry winter rainfall garden or container.		
<b>Pleiospilos bolusii</b>		Mesemb.
Stone plant		
So-called 'stone plants' because their very fat leaves resemble weathered stones, shelter from wet conditions. Best as a pot plant under controlled conditions.		
<b>Pleiospilos compactus</b>		Mesemb.
Stone plant		
So-called 'stone plants' because their very fat leaves		

resemble weathered stones, shelter from wet conditions.  
Best as a pot plant under controlled conditions.

**Pleiospilos compactus subsp. canus**

Mesemb.

Small tufted succulent with dull green leaves. Flowers yellow. Best cultivated in containers, preferably in a green-house. Give water sparingly in summer and winter.

**Pleiospilos nelii**

Mesemb.

A dwarf species with rounded leaf pairs, best in pots or miniature rockeries under controlled conditions.

**Pleiospilos simulans**

Mesemb.

Stone plant

Small tufted succulent, large spreading grey-green leaves resembling a stone, flowers yellow, best in containers in a green-house, keep dry in summer.

**Portulacaria afra**

Portulacaceae

Spekboom

Succulent shrub, drought-resistant, rounded green leaves, evergreen, pink flowers in profusion in early summer, good patio, hedge or rockery subject.

2 m

**Quaqua mammillaris**

Asclepiadaceae

Erect, branched, thorny stem succulent, edible, attractive black flowers, suitable for containers, well-drained sandy soil, keep dry in summer.

**Rabiea albinota**

Mesemb.

Dwarf tufted succulent with dull green leaves, flowers yellow. Best cultivated in containers, preferably in green-house. Water sparingly, winter and summer.

**Rabiea albigunda**

Mesemb.

Dwarf tufted succulent with dull-green keeled leaves. Flowers yellow. Best cultivated in containers, preferably in a green-house. Water sparingly, winter and summer.

**Rabiea difformis**

Mesemb.

Dwarf tufted succulent with grey-green keeled oblong leaves, flowers yellow, best in containers in a green-house, water sparingly winter and summer.

<b>Rhinephyllum macradenium</b>	Mesemb.
A spreading succulent with small compact leaves. Flowers yellow. Water sparingly. Suitable for dry karoo-like regions.	
<b>Rhombophyllum dolabriforme</b>	Mesemb.
Dwarf, mat-forming, freely-branched shrub, bright green leaves, golden-yellow flowers in winter.	
<b>Rhombophyllum rhomboideum</b>	Mesemb.
Erect, dwarf, succulent shrub, attractive leaves, flowers yellow, summer, for containers or dry well-drained rockeries, sow summer or winter.	
<b>Ruschia bijliae</b>	Mesemb.
Spreading succulent with short grey-green leaves. Flowers mauve. Suitable for dry well drained karoo rockeries. Propagated from seed or cuttings. Sow during summer or winter.	
<b>Ruschia caroli</b>	Mesemb.
Vygies	
Shrub, flowers pink with purple stripes, spring.	600 mm
<b>Ruschia crassa</b>	Mesemb.
Branched succulent with grey succulent stems. Leaves small reduced, flowers mauve. Suitable for dry karoo gardens.	800 mm
<b>Ruschia evoluta</b>	Mesemb.
Dwarf compact succulent with short grey leaves, flowers mauve, suitable for containers or dry well-drained winter rainfall karoo rockeries.	
<b>Ruschia frutescens</b>	Mesemb.
Rapid growing shrub, white vygie flowers in summer, winter growing, dry rockeries.	1m
<b>Ruschia gemina</b>	Mesemb.
Dwarf, clump forming leaf-succulent with purple vygie flowers during spring, dry rockeries.	60 mm
<b>Ruschia geminiflora</b>	Mesemb.
Spreading branched leaf succulent rooting at nodes, flowers purplish during spring, suitable for fynbos gardens.	

<b>Ruschia gracillima</b>	Mesemb.
Dwarf, spreading succulent shrub, oblong leaves, flowers purplish-pink, summer, for containers or dry well-drained rockeries, sow summer or winter.	
<b>Ruschia indurata</b>	Mesemb.
Low creeping plant with bluish green leaves and pink flowers in summer, recommended, dry rockeries.	
<b>Ruschia lineolata</b>	Mesemb.
Mat-forming groundcover, purplish mauve vygie flowers in spring, dry rockeries.	
<b>Ruschia macowanii</b>	Mesemb.
Spreading shrub, dull green, succulent leaves, numerous purple-pink flowers in spring, rockeries and difficult coastal gardens.	
<b>Ruschia marianae</b>	Mesemb.
Dwarf, erect, succulent shrub, terete leaves, flowers red, spring, for containers or dry well-drained rockeries, sow winter.	
<b>Ruschia maxima</b>	Mesemb.
Succulent shrub, pink vygie flowers in winter, suitable for rockeries.	
<b>Ruschia multiflora</b>	Mesemb.
Shrub, multi-branched, numerous white vygie flowers in summer, suitable for coastal gardens.	
<b>Ruschia perfoliata</b>	Mesemb.
Spreading shrub, pink vygie flowers.	
<b>Ruschia pungens</b>	Mesemb.
Upright shrub, deep pink vygie flowers, summer.	
<b>Ruschia strubeniae</b>	Mesemb.
Shrub, leaves boat-shaped, purplish pink vygie flowers in early summer, rockery subject.	
<b>Sansevieria aethiopica</b>	Dracaenaceae
Mother-in-laws tongue.	
Tufted with subterranean horizontal stems and erect linear mottled leaves in rosettes. Plant forming dense groups. Inflorescence a elongated raceme, the long tubular flowers opening towards the evening. Easily propagated by division or seed.	

<b>Sansevieria hyacinthoides</b>	Dracaenaceae
Mother-in-laws-tongue, Skoonma-se-tong, Wildewortel	
Acaulescent stoloniferous succulent with rigid mottled tongue shaped leaves, white flowers in summer, semi-shade or shade, suitable for containers.	300-500mm
<b>Sansevieria pearsonii</b>	Dracaenaceae
Leaves distichous, with a dangerous sharp point, stoloniferous, form in large groups, for containers and rockeries.	600 mm
<b>Sansevieria trifasciata</b>	Dracaenaceae
Clump-forming with subterranean stems and erect linear mottled leaves forming dense groups, inflorescence a elongated raceme, long tubular flowers open towards the evening, easily propagated from division, suitable for containers or shady areas under tree	
<b>Sarcostemma viminale</b>	Asclepiadaceae
Spantou, Melktou	
Leafless succulent, spreading often twining pencil-like stems with milky latex, yellowish green flowers, suitable for coastal gardens.	
<b>Sceletium concavum</b>	Mesemb.
Kougoedvygie	
Spreading dwarf vygie with flattish leaves, straw yellow flowers. Best for dry rockeries or as a container plant.	
<b>Schwantesia herrei</b>	Mesemb.
Compact dwarf vygie, grey-green leaves, yellow flowers, sow summer or winter. Best in a container under greenhouse conditions.	
<b>Schwantesia marlothii</b>	Mesemb.
Dwarf, erect, succulent shrub, terete leaves, flowers yellow, summer, for containers or dry, well-drained rockeries, sow summer or winter.	
<b>Schwantesia triebneri</b>	Mesemb.
Compact dwarf vygie, grey-green toothed leaves, yellow flowers, sow summer or winter. Best in a container under greenhouse conditions.	
<b>Scopelogena gracilis</b>	Mesemb.
Cushion plant, succulent leaves, yellow 'vygie' flowers in spring. Best for fynbos gardens.	300 mm

<b>Scopelogena vereculata</b>	Mesemb. 600 mm
Spreading to erect succulent herb, with oblong cylindric grey-green leaves, flowers yellow, suitable for fynbos gardens in full sun or light shade, or dry well drained rockeries.	
<b>Senecio abbreviatus</b>	Asteraceae
Spreading, procumbent plant with thin branches bearing oblong succulent leaves, flowers yellow, suitable for containers and dry winter rainfall gardens, sow during autumn.	
<b>Senecio articulatus</b>	Asteraceae
Prostrate creeping succulent with incised foliage, mottled green stems, containers or dry shady rockeries.	
<b>Senecio citrifolius</b>	Asteraceae
Spreading tufted succulent bearing grey-green club-shaped leaves, flowers yellow, suitable for containers or dry winter and summer rainfall gardens, sow during autumn.	
<b>Senecio crassulaefolius</b>	Asteraceae
Spreading branched low succulent with oblong terete grey-green leaves, flowers white, suitable for dry winter rainfall gardens, preferably rockeries.	
<b>Senecio ficoides</b>	Asteraceae
Spreading branched succulent shrub with oblong grey-green leaves. Flowers white. Suitable for dry winter or summer rainfall gardens, preferably rockeries. Easily propagated from cuttings.	
<b>Senecio haworthii</b>	Asteraceae
Succulent leaves, white-felted, yellow flowers.	
<b>Senecio muiirii</b>	Asteraceae
Spreading, procumbent, rooting when touching the ground, attractive flat grey-green leaves, flowers white, suitable for containers or dry winter and summer rainfall gardens, sow during autumn.	
<b>Senecio radicans</b>	Asteraceae
Prostrate succulent, pointed swollen leaves, lime yellow daisy flowers, containers and shallow soil in dry fynbos rockeries.	

**Senecio rowleyanus**

Tufted, many stemmed, full sun, rockeries, water in summer and winter.

Asteraceae  
600 mm

**Senecio succulentus**

Spreading shrub with oblong terete leaves, flowers yellow, suitable for dry winter-rainfall gardens. sow autumn.

Asteraceae

**Skiatophytum tripolium**

Prostrate, mat-forming, large flat leaves, large white 200mm vygie flowers in spring, for well-drained winter-rainfall gardens, tolerates shade, sow autumn, seeds difficult to germinate.

Mesemb.

**Stapelia**

Asclepiadaceae

Branched decumbent -bending upwards from a prostrate base, spreading, stem succulents forming small clusters or large groups. The stems are oblong, often 4-angled, hairy, green to grey green. Flowers large (up to 160 mm) with 5

spreading maroon to dark lobes with a hairy margin smelling like rotten meat. Fruits are a pared follicle, resembling a pair of horns. The seeds are flat, with a fluffy parachute. Easily propagated from cuttings or seed during summer. Suitable for dry rockeries or containers. Keep in partial shade.

**Stapelia gigantea**

Asclepiadaceae

Giant carrion flower.

Hairy, succulent stem, large flowers, rockeries, light shade, keep dry in winter.

**Stoeberia arborea**

Mesemb.

Rooivye

Erect rounded woody shrub, bearing oblong clavate grey-green succulent leaves and reddish young stems. Flowers white-pink in terminal panicles. Easily propagated from seed. Suitable for dry winter rainfall gardens or containers.

2.5m

**Stoeberia carpii**

Mesemb.

Langarmvygie

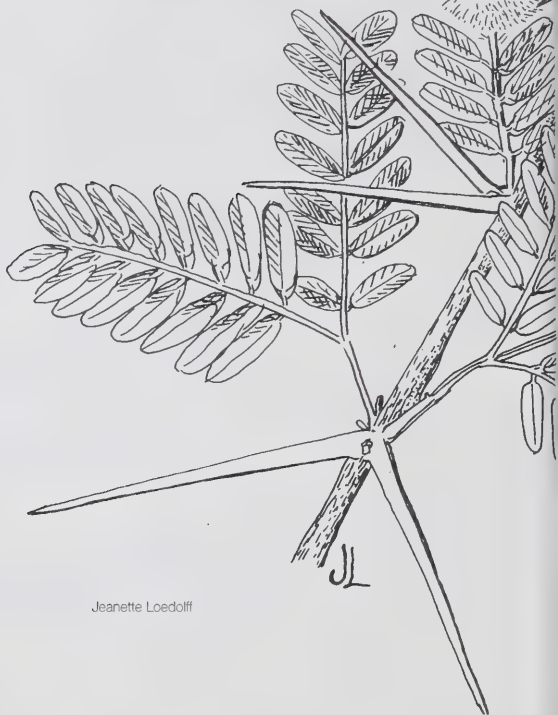
Spreading leaf succulent, branches long and leaning. Leaves glaucous, oblong, laterally compressed. Flowers at branch ends, white to 40mm in diameter. Suitable for dry winter rainfall gardens or containers elsewhere.

800mm

<b>Stoeberia littlewoodii</b>	Mesemb. 60 mm
Succulent, small lilac vygie flowers in spring. Suitable for dry winter-rainfall strandveld gardens.	
<b>Stomatium mustellinum</b>	Mesemb.
Small tufted vygie with light green leaves and yellow flowers, suitable for containers in well-drained soil.	
<b>Tanquana archeri</b>	Mesemb.
Dwarf succulent with rounded leaves resembling a pebble, flowers yellow, autumn, best in containers in a green-house, water sparingly winter and summer, sow autumn.	
<b>Tanquana prismatica</b>	Mesemb.
Dwarf succulent, keeled leaves resembling a stone, flowers yellow. autumn, best in containers in a greenhouse, keep dry winter and summer, sow autumn.	
<b>Thorncroftia succulenta</b>	Lamiaceae 600mm
Ornamental, upright aromatic herb, with fleshy leaves and stems. Flowers tubular, mauve flowers during the autumn. Suitable for summer rainfall gardens. Easily propagated from cuttings or seed. Resistant to light frost.	
<b>Titanopsis calcarea</b>	Mesemb.
Compact dwarf rosette succulent, straw yellow vygie flowers, suitable for containers.	
<b>Titanopsis hugo-schlechteri</b>	Mesemb.
Dwarf compact succulent with papillate tongue-like leaves, flowers yellow, best cultivated in containers, preferably in a green-house, keep dry during winter.	
<b>Titanopsis primosii</b>	Mesemb.
Compact dwarf rosette succulent, straw yellow flowers, suitable for containers.	
<b>Trichodiadema densum</b>	Mesemb.
Compact mat-forming dwarf succulent covered with spines, like a miniature cactus, dark pink vygie flowers in winter, good container plant.	
<b>Trichodiadema mirabile</b>	Mesemb.
Dwarf succulent shrublet, terete leaves, flowers white in	

summer, for containers or dry well-drained rockeries, sow summer or winter.	
<b>Trichodiadema stellatum</b>	Mesemb.
Mat-forming succulent, red or mauve vygie flowers in autumn.	
<b>Tylecodon cacaliodes</b>	Crassulaceae
Nenta, Kafkai	
Shrubby succulent perennial, bright yellow flowers, late summer, sow autumn.	300 - 600 mm
<b>Tylecodon grandiflorus</b>	Crassulaceae
Rooisuikerblom	
Spreading succulent perennial, tuberous roots, oblong, deciduous leaves, flowers carried on elongated stalk, attractive, large, tubular, orange-red, in late summer, pollinated by birds, suitable for rockeries in dry coastal winter rainfall garden.	150-400mm
<b>Tylecodon hirtifolius</b>	Crassulaceae
Shrubby succulent, deciduous, winter growing, stems with large phyllopodia, hairy leaves, yellowish flowers.	
<b>Tylecodon kritzingeri</b>	Crassulaceae
Spreading scandent succulent with tuberous roots bearing oblong, deciduous leaves, flowers carried on an elongated stalk, attractive, large, tubular, orange-red, February, pollinated by birds, suitable for rockeries in dry coastal winter rainfall gardens.	
<b>Tylecodon paniculatus</b>	Crassulaceae
Botterboom	
Fleshy stemmed shrub, red and green flowers in summer, prefers full sun and dry slopes.	1 - '2 m
<b>Tylecodon racemosus</b>	Crassulaceae
Dwarf shrub, peeling bark, white flowers, deciduous winter growing, sow in autumn.	
<b>Tylecodon reticulatus</b>	Crassulaceae
Oukoe	
Low, multi-branched shrub, old flower stems forming a tangled covering, small yellow flowers, summer, suitable for small rockeries.	100 - 300 mm

- Tylecodon rubrovenosus** Crassulaceae  
 Sparingly branched, yellowish flowers, best in containers in a greenhouse.
- Tylecodon schaeferianus** Crassulaceae  
 A dwarf succulent with fat stems, small round leaves, pink flowers in summer, and fleshy roots. Suitable for containers, keep dry in summer.
- Tylecodon ventricosus** Crassulaceae  
 Klipnenta  
 Perennial with short succulent stems and tuberous roots, striated leaves, brownish yellow flowers in summer, winter growing, sow autumn. 600mm
- Tylecodon wallichii** Crassulaceae  
 Kokerbos  
 Deciduous succulent shrub, leaves linear, terete, flowers yellow in terminal panicles, summer, containers and dry winter-rainfall rockeries, full sun, keep dry in summer.
- Vanheerdea divergens** Mesemb.  
 Dwarf succulent with rounded leaves resembling a pebble, flowers yellow, autumn, best cultivated in containers, preferably in a greenhouse, keep dry during winter and early summer.



Jeanette Loedolff



## TREES

South Africa is blessed with a rich and varied tree flora amounting to approximately 1000 species. This is quite remarkable when compared with the 100 species found in Europe.

About half of the southern African species are found in high forest that is limited to only 0.2% of the land area in the country. These forests are often associated with protected moist and humid environments such as mountain slopes, river valleys or gorges and kloofs. The other half is spread among many different habitats including open savannah, plateaux, deserts, and dry river valleys to name but a few.

### Climate and distribution

Climate, altitude, aspect and soil all determine the distribution of trees. Many of our trees are limited to moist forest environments, while others are suited to open savannah, swamps, dry valleys or cooler coastal environments. The availability of moisture either from precipitation, coastal mists, or from rivers or underground sources is the key to the ability of trees to survive. The protection and preservation of our water resources are therefore of utmost importance. Nutrient availability and warmth are also major factors that affect tree growth.

Summer rainfall is the predominant weather pattern in South Africa. Only the west and south-western Cape is exposed to winter rainfall with the southern Cape receiving intermittent rain throughout the year. The majority of our trees are exposed to summer rainfall and cool to cold dry winters. Most of them grow and flourish in warm and wet conditions, and growth slows down during cold conditions until the next summer.

Our tree flora is relatively poorly represented in the winter rainfall areas of the Cape, but species diversity increases as we move eastwards. From the temperate southern Cape forests to KwaZulu-Natal and Mpumalanga the climate becomes increasingly tropical and many new species may be found.

The woodland species found in the interior are exposed to much colder and drier winters with the result that many of them are deciduous.

## Microclimate

There are a number of species that are widely distributed and tolerant of a range of conditions. The differing conditions can have a marked effect on the growth habit of the trees. The local climatic and micro-environment must be taken into account when trees are planted in your area.

A good example is *Cassine peragua* which is a tall tree of over 10 m in protected forested kloofs whereas it may only grow to 1.5 m in coastal scrub bush. There are species, such as *Acacia karroo*, that are very adaptable and will grow under a wide range of conditions outside its natural distribution. Trees must be carefully studied and selected for

suitability in the positions they will be planted. Failure to do this will more often than not result in disappointment. The purpose of this book is to help gardeners make the correct choices.

## Trees are useful

Trees probably have more uses to man and beast than any other plant. Shelter and food are two obvious ones. For gardeners and urban planners we may list the following:

Trees provide shade that is important in adapting harsh city streets, public open spaces or hot gardens into a more pleasant and liveable outdoor space.

They may be used as barriers to screen unsightly views, windbreaks or to reduce noise pollution.

Trees are effective in reducing the levels of atmospheric pollution in cities by absorbing some pollutants and filtering dust.

A very important and often underestimated value is the improvement that trees make to the aesthetics of an area.

It is very important that careful note of shape, size and texture be made in the selection process.

Choice of tree species will also depend on the area. Trees with vigorous and invasive roots will not be suitable in confined areas where they may disturb paving, walls or block underground pipes. Deciduous trees are very useful in areas that require shade in summer and extra sunlight penetration in the cool winter months.

## Care and planting

Successful establishment of trees depends on a number of factors:

## Selecting the right tree species for the area.

Choosing good quality trees from the nursery. The trees should have straight strong stems and should not be root bound.

The planting hole should be properly prepared so that it is large enough. A fill of good soil medium containing well-rotted compost should be used. Nutrients should be added to encourage good growth. Addition of bonemeal and a slow release chemical fertilizer is recommended and should be repeated at the beginning of every growing season.

The tree must be supplied with liberal and regular quantities of water during the growing season.

If these basic requirements are attended to then some of the great fallacies of planting and caring for indigenous plants will be dispelled.

## Fallacies about indigenous plants dispelled

The majority of indigenous plants require liberal quantities of rich compost and regular feeding with chemical or organic fertilisers.

Most species are hardy and need not be treated differently from 'exotic' species.

Many tree species are relatively fast growing provided they are supplied with adequate nutrients and are watered regularly during the warm growing season.

Trees have the regular habit of outliving the people who plant them. Trees are dependent upon the care and treatment they receive. Trees can therefore be a wonderful legacy to whoever plants them.

## Trees

### **Acacia ataxacantha**

Flame acacia, Vlamdoring

Thorny climber, straggling shrub or small tree, sharp hooked prickles scattered along younger stems and leaves, flowers in creamy white spikes in summer, young pods brilliant red in winter, sow in spring.

Fabaceae

3-10 m

### **Acacia borleae**

Sticky acacia, Kleefdoring

Small slender tree, or shrub, branching from base, often thicket forming, young branches with reddish sticky glands, 50mm slender white spines, flowers in small yellow balls, summer, small slender sticky pods, markedly constricted between the seeds.

Fabaceae

5m

### **Acacia burkei**

Black monkey thorn, Swartapiesdoring.

Large spreading Acacia with larger than usual leaflets, good bonsai subject.

Fabaceae

15m

<b>Acacia caffra</b>	Fabaceae
Common hook thorn, Gewone haakdoring	
Graceful, deciduous, flowers creamy-yellow, quick-growing, frost-and drought-resistant.	8m
<b>Acacia erioloba</b>	Fabaceae
Camel thorn, Kameeldoring	
Wide spreading crown, bark grey to blackish-brown deeply furrowed, spines almost straight, swollen bases, flowers in bright golden-yellow balls, spring, thick short pods covered in greyish velvety hairs, summer, soak seed in hot water, sow spring.	5-16m
<b>Acacia galpinii</b>	Fabaceae
Monkey thorn, Apiesdoring.	
Large tree in wooded grassland, brown corky bark, creamy flowers in spring, fairly frost resistant.	25m
<b>Acacia haematoxylon</b>	Fabaceae
Grey camel thorn, Vaalkameeldoring	
Attractive graceful small tree, pale grey foliage, slender straight creamy-white spines, flowers in yellow balls, summer, fruit a long slender pod, autumn, sow spring, adapted to arid areas, difficult to cultivate.	6m
<b>Acacia hebeclada</b>	Fabaceae
Candle thorn, Trassiedoring	
Small tree branching from near ground level forming thickets, bark dark grey and flaky, flowers creamy-white balls in spring, pods woody straight and swollen, covered with yellow-grey woolly hairs and standing upright during summer, sow in spring, hardy.	4-7m
<b>Acacia hebeclada subsp. tristis</b>	Fabaceae
Candle thorn	
Hardy small to medium-sized tree with creamy white puff ball flowers. Pods stand upright hence the common name. Makes good security hedge. Plant in full sun in well drained soil.	
<b>Acacia karroo</b>	Fabaceae
Sweet thorn, Soetdoring	
Deciduous, thorny, aromatic yellow flowers, good nectar and pollen source, frost- and drought-resistant, fast-growing.	7m

<b>Acacia luederitzii var. luederitzii</b>	Fabaceae
False umbrella thorn, Hakiesbos	
A thorn tree with a flattish crown. Flowers from November to February in round heads. Flowers are scented and white to cream in colour. Protect young plants from frost. Drought-resistant.	5-7 m
<b>Acacia luederitzii var. retinens</b>	Fabaceae
Rooi-wag-n-bietjie, Swarthakkiesdoring	
A tree with a dense rounded crown and a spread of 6 m. Flowers from November to February. White to cream, scented flowers. Protect young plants against frost. Drought-resistant.	6 m
<b>Acacia mellifera</b>	Fabaceae
Black thorn, Swarthaak	
Small tree with white flowers from September to November followed by flat, papery pods. Frost and drought hardy. Good screening plant. Produces nectar and pollen which attract insects. Popular with bee farmers.	5-8 m
<b>Acacia mellifera subsp. detinens</b>	Fabaceae
Black thorn, Swarthaak	
Prickles are dark brown or blackish, short and curved, in pairs below each node, leaves blue-green, flowers in white balls in early summer, sow in spring. Beware: trees spread very rapidly forming impenetrable thickets.	5-8m
<b>Acacia nigrescens</b>	Fabaceae
Knob thorn, Knoppiesdoring	
A deciduous tree, in spring the bare tree is covered in a mass of pink buds, followed by creamy-yellow, scented spikes. Sensitive to frost, but drought resistant. A favoured tree of hole-nesting birds.	7-20 m
<b>Acacia nilotica</b>	Fabaceae
Scented thorn, Lekkerruikpeul	
Flattened crown, bark reddish-brown, smooth when young, black-grey and rough with age, spines long slender and straight, whitish often reddish-brown, flowers in yellow balls in summer, sow in spring.	5-10m
<b>Acacia rehmanniana</b>	Fabaceae
Silky acacia, Sydoring	
A deciduous tree with flowers from December to	5-6 m

February. Round heads of showy white flowers, followed by seedpods. Young plants must be protected against frost. Drought resistant.

**Acacia robusta**

Fabaceae

Splendid thorn, Enkeldoring

6-8 m

Fast-growing deciduous tree. Bears masses of white flowers in early spring. Drought and frost hardy. Good shade tree.

**Acacia schweinfurthii var. schweinfurthii**

Fabaceae

River climbing acacia, Rivierrankdoring

1-5m

Shrub, small spreading tree or robust climber, frequently forming dense thickets, hooked prickles scattered along the stems, leaves bright green, flowers cream-white balls in summer, pods oblong leathery in autumn, sow in spring.

**Acacia sieberana var. woodii**

Fabaceae

Paperbark acacia, Papierbasdoring

7-17m

Fast growing deciduous tree with a typical flat crown, papery bark, and white flowers in spring, frost hardy, suitable for subtropical bushveld gardens. Sow in spring.

**Acacia tortilis**

Fabaceae

Umbrella thorn, Haak-en-steek

5-20m

Medium to large, densely leafed trees, larger specimens conspicuously flat-topped, both hooked and straight thorns, leaves bluish-grey-green, flowers cream-white balls, summer, pods tightly contorted, sow spring, slow-growing, drought tolerant.

**Acacia tortilis subsp. heteracantha**

Fabaceae

Umbrella thorn, Haak-en-steek

8 m

Thorny, medium-sized tree with dense flattened crown. Bears masses of scented white flowers in round heads from November to January. Thrives in hot, dry conditions. Tolerates moderate frost.

**Alberta magna**

Rubiaceae

Natal flame bush, Breekhoût

5-13m

Medium sized tree, glossy dark green leaves, brilliant crimson red flowers in summer, winged fruit brilliant red to scarlet, late summer-winter, slow growing, spectacular garden plant though better for coastal gardens, sow in spring. Place in semi-shade.

<b>Albizia adianthifolia</b>	Fabaceae
Flat-crown, Platkroon	
Large tree with conspicuous flat crown, flaking roughish grey to yellow-brown bark, dark green foliage, attractive white flowers forming half-spherical heads, spring, sow spring.	10 - 40m
<b>Albizia amara</b>	Fabaceae
Bitter albizia, Bittervalsdooring.	
Large deciduous tree, frost tender, leaves feathery, small cream flowers, in spring.	8 - 12 m
<b>Allophylus dregeanus</b>	Sapindaceae
Simple-leaved allophylus, Bosbastertailbos	
Small tree, bright green leaves, red-orange berries in winter attract birds, sow in spring.	7m
<b>Allophylus natalensis</b>	Sapindaceae
Dune allophylus, Duinebastertaaibos	
Shrub or small tree, bark grey, leaves tri-foliolate, bright red berries in winter, sow seed in spring.	2-5m
<b>Aphloia theiformis</b>	Flacourtiaceae
Mountain peach	
Small tree with glossy, bright green foliage. Bears sweetly-scented flowers in profusion. Plant in a full sun to semi-shady spot and give lots of water. Protect from severe frost.	3-5 m
<b>Apodytes dimidiata subsp. dimidiata</b>	Icacinaceae
White pear, Witpeer	
Dense, evergreen forest tree, glossy bright-green leaves, sprays of white flowers, summer, slow to germinate, hardy, protect when young.	3 - 15 m
<b>Apodytes sp. nova</b>	Icacinaceae
Evergreen, fast-growing rounded canopy tree with white bark, suitable for warm subtropical gardens, white flowers and black berries in autumn.	10 m
<b>Atalaya alata</b>	Sapindaceae
Lebombo wing-nut, Lebombokransesseboom	
Small to medium sized deciduous tree, pale grey warty bark, leaves compound dark green, attractive small white flowers in terminal heads in early summer, fruit a winged nut in late summer, sow spring.	5-10m

**Atalaya capensis**

Cape wing-nut, Kaapse kranseboom

Small tree, very pale to whitish bark, dark green compound leaves, cream flowers in branched axillary heads, mid summer, fruit a nut with yellowish-brown wings.

Sapindaceae

3-10m

**Atalaya natalensis**

Natal wing-nut, Natalse kranseboom

Small to medium sized tree, pale grey bark, dark green compound leaves, small greenish-white flowers in dense terminal sprays, mid-summer, pale brown winged fruits in autumn, sow spring.

Sapindaceae

5-10m

**Berchemia zeyheri**

Red ivory, Rooi-ivoor

An evergreen, well shaped tree. Bears pale red fleshy fruits in mid-summer which attract birds. Slightly frost tender. Full sun. Has beautiful bright pink-red wood.

Rhamnaceae

9 m

**Bersama lucens**

Glossy white ash, Blinkblaarwitessenhout

Large tree, flowers white, winter-spring, used in african medicine, parts of tree regarded as poisonous.

Melanthaceae

8m

**Bersama tysoniana**

Common bersama, Gewone witessenhout

Small to medium sized tree, or large shrub, rough corrugated bark, greenish-white to cream flowers in dense upright spike-like racemes in spring-summer, fruit a brown rounded capsule in autumn, sow spring.

Melanthaceae

3 - 10 m

**Bolusanthus speciosus**

Tree wisteria

Graceful, neat tree with glossy foliage. Bears drooping sprays of scented, pea-shaped, mauve flowers in spring or summer. Protect young plants from frost. Drought hardy.

Fabaceae

6 m

**Brabejum stellatifolium**

Wild almond, Wilde-amandel

Evergreen, spreading, leaves star-like, conspicuous, white sweetly-scented flowers in summer, almond-shaped fruit, lilac-purple colour when young, turning rusty brown when mature, late summer to

Proteaceae

8m

<b>Brachylaena discolor</b>	Asteraceae
Coast silver oak, Kusvaalbos	
Attractive grey foliage, evergreen, suitable for coastal gardens, frost-sensitive.	4 - 10 m
<b>Brachylaena elliptica</b>	Asteraceae
Bitter-leaf, Bitterblaar	
Small evergreen tree or large shrub, suitable for coastal gardens.	3 m
<b>Brachylaena neriifolia</b>	Asteraceae
Water white alder, Waterwitels	
Tree or medium shrub, grows well in moist environments or waterside, lanceolate leaves, whitish flowers, summer, fruit a small nutlet.	2 - 3 m
<b>Brachylaena rotundata</b>	Asteraceae
Mountain silver oak, Bergvaalbos	
Evergreen tree, attractive serrated grey foliage, will tolerate some frost, but not for very cold areas.	5m
<b>Breonadia salicina</b>	Rubiaceae
Mingerhout	
Erect evergreen tree, glossy loquat-like foliage, needs moisture.	5m
<b>Bridelia micrantha</b>	Euphorbiaceae
Mitzeeri, Mitserie	
Small to medium sized tree, large glossy dark green leaves, bright autumn colours, small yellowish flowers in clusters in spring, edible blackish fruits, late summer, sow spring, a fast-growing attractive shade tree.	7 - 15 m
<b>Buddleja saligna</b>	Loganiaceae
False olive, Witolienhout	
A fast growing small to medium tree, dark green shiny leaves with grey underside, sweet-scented cream flowers in spring, fast growing and hardy, a good garden tree, sow autumn or spring, attracts butterflies.	4-7m
<b>Calodendrum capense</b>	Rutaceae
Cape chestnut, Wilde kastaaing	
An attractive large tree with a spreading crown, large shiny dark green leaves, scented pink flowers in large terminal sprays in summer. Does well in a warm sheltered position with good composted soil, cold sensitive. Sow spring or autumn.	7-20m

<b>Calpurnia aurea</b>	Fabaceae
Natal laburnum, Natalse geelkeur.	
Attractive small tree, ideal tree for small gardens, showy, showers of yellow flowers, December to February, frost-tender. Sow in spring.	2-4 m
<b>Calpurnia aurea subsp. aurea</b>	Fabaceae
Natal geelkeur, Natal labarnum	
A fast-growing tree (up to 1 m per year under warm conditions), with golden yellow flowers in hanging bunches, from December to February. Flowers even when very young and as low as 1 m. Protect young tree from frost. Good for small gardens.	
<b>Calpurnia villosa var. intrusa</b>	Fabaceae
Small tree, light green compound leaves, flowers yellow, summer-flowering, frost-tender.	2 - 4 m
<b>Canthium inerme</b>	Rubiaceae
Turkey-berry, Bokdrol	
Shrub or small tree, grey bark, small green flowers, early summer, purple to black oval fruit, late summer, sow autumn or spring.	3-10m
<b>Canthium mundianum</b>	Rubiaceae
Rock alder, Klipels	
Small tree or shrub, sometimes spiny, greenish flowers in late summer, sow autumn or spring.	1-5m
<b>Cassine aethiopica</b>	Celastraceae
Kubu-berry, Koeboebessie	
Small to medium sized evergreen tree, rough bark, dark green glossy leaves, wind-resistant in coastal gardens, edible bright red plum-like fruit in summer.	4-12m
<b>Cassine crocea</b>	Celastraceae
Red saffronwood, Rooisaffraan	
Spreading tree, often gnarled with a stout trunk; bark whitish to yellowish smooth; leaves dark green; attractive oval pale yellow fruits in winter; wind resistant; sow autumn or spring.	8-13m
<b>Cassine papillosa</b>	Celastraceae
Common saffronwood, Gewone saffraan	
Small tree or shrub, leathery thick dark green leaves; small whitish flowers followed by lemon-yellow berry-like fruits. sow spring or autumn.	4-10m

<b>Cassine peragua</b>	Celastraceae
Bastard saffron, Bastersaffraan. Evergreen shade tree with glossy foliage. This is a tough, wind resistant tree.	4 - 5 m
<b>Cassine tetragona</b>	Celastraceae
Climbing saffronwood, Ranksaffraan Climbing shrub or small tree; bark grey; leaves often with bluish bloom; fleshy red fruits in spring. Sow spring or autumn.	3-5m
<b>Cassinopsis ilicifolia</b>	Icacinaceae
Lemon thorn, lemoentjedorning Evergreen small tree or scrambling shrub. Shiny green leaves, pale grey to brown bark, small creamy flowers and orange berry fruit in late summer.	5 m
<b>Catha transvaalensis</b>	Celastraceae
A small to medium tree with attractive reddish-brown bark. Leaves are grey-green with long brownish hairs below.	9 m
<b>Catunaregam spinosa</b>	Rubiaceae
A spiny small tree with grey mottled bark, clusters of dark green velvet leaves and attractive white gardenia-like flowers that fade to yellow. The persistent, hard, spherical fruit is up to 25 mm long and greenish-brown when mature.	5m
<b>Celtis africana</b>	Ulmaceae
White stinkwood, Witstinkhout Deciduous, spreading crown, bark smooth, grey, drought- and frost-tolerant, recommended for large gardens, parks or as street trees, bonsai subject.	10-20m
<b>Chaetacme aristata</b>	Ulmaceae
Thorny elm, Doringolm Multi-stemmed, thorny, evergreen shrub or tree. Slightly frost tender	8 m
<b>Chionanthus foveolatus subsp. foveolatus</b>	Oleaceae
Common pock ironwood, Gewone fynblaarysterhout A hardy evergreen tree. Frost resistant. Full sun. Produces black fruits which attract birds. Medium growth rate.	8 m

<b>Chionanthus foveolatus subsp. major</b>	Oleaceae
Pock iron wood	
Small to medium tree with handsome foliage. Full sun.	2-5 m
Frost resistant. Black fruits eaten by birds and animals.	
Enjoys moist, rich soil. Moderate growth rate.	
<b>Choristylis rhamnoides</b>	Escalloniaceae
False dogwood, Basterblinkhout	
Large, spreading shrub or small tree, young growth pinkish.	3-4m
<b>Chrysophyllum viridifolium</b>	Sapotaceae
Forest milkplum, Bosstamvrug	
Large forest tree, spreading crown, dark glossy green leaves, yellowish flowers, edible yellow fruit during late summer.	10 - 40 m
<b>Clausena anisata</b>	Rutaceae
Horsewood, Perdepis	
Small tree, aromatic dark green foliage, yellow flowers in spring, spherical red and black fruit.	3 m
<b>Combretum caffrum</b>	Combretaceae
Cape bushwillow, Kaapse vaderlandswilg	
Small to medium tree, shiny green foliage, greenish yellow flowers in spherical heads, 4-winged reddish brown fruits, late summer.	5 -10m
<b>Combretum collinum subsp. suluense</b>	Combretaceae
Weeping bushwillow, Treurboswilg	
Flowers cream to yellow, sweetly scented, conspicuous when in full bloom, spring, red winged fruits, grows in summer rainfall areas.	4-12m
<b>Combretum erythrophyllum</b>	Combretaceae
River bushwillow, Riviervaderlandswilg	
Graceful spreading tree, deciduous, red autumn shades, flowers green-yellow, 4-winged fruited, fast growing, hardy, easily cultivated.	6 m
<b>Combretum kraussii</b>	Combretaceae
Forest bushwillow, Bosvaderlandswilg	
Shrub or small to medium sized tree, leaves turn red in autumn and fall in winter, fruit 4-winged russet-red to mid-brown in late summer, quick-growing, attractive garden subject.	8-12m

<b>Combretum molle</b>	Combretaceae
Velvet bushwillow, Fluweelboswilg	
Shrub or small tree, grey-brown bark, leaves simple, elliptic to circular, dense grey hairs on both surfaces, greenish yellow flowers in early summer, fruit January to June.	7 - 10 m
<b>Combretum vendae</b>	Combretaceae
A newly described rare species, from the Zoutpansberg, does well in a warm, well drained position in the Cape.	5 m
<b>Commiphora harveyi</b>	Burseraceae
Bronze paper commiphora, Rooistamkanniedood	
Small squat deciduous tree, taller in lowveld, bark peels in large bronze papery flakes, small whitish flowers in early summer, fruits red when mature in late summer.	5-10m
<b>Croton gratissimus</b>	Euphorbiaceae
Lavender feverberry, Laventelkoorsbessie	
Flowers small, cream to golden-yellow in spring, fruit yellow in late summer, leaves aromatic when crushed, ornamental tree.	10m
<b>Croton megalobotrys</b>	Euphorbiaceae
A medium sized, densely leafy tree with smooth pale grey bark. Leaves are large and triangular in shape, covered in silvery-green leaves when young. Bark and seeds are used medicinally.	15 m
<b>Croton sylvaticus</b>	Euphorbiaceae
Forest fever-berry, Boskoorsbessie	
A small to large tree with bright orange fruit when ripe. Decorative shade tree, especially when in fruit. Bears cream flowers in summer. Protect young plants from frost. Attracts fruit-eating birds.	7-13 m
<b>Cryptocarya latifolia</b>	Lauraceae
Broad-leaved laurel, Breeblaarkweper	
Small to large tree with attractive foliage and large green fruits. Tolerates moderate frost. Full sun or semi-shade position. Spherical wooden seeds are washed up on the beach. Handsome foliage plant.	
<b>Cryptocarya liebertiana</b>	Lauraceae
Wild quince, Wilde kweper	
Evergreen tree, aromatic leaves, large, 20 mm, plum-red fruits, suitable for wind-free gardens, good bird tree.	20 m

<b>Cryptocarya myrtifolia</b>	Lauraceae
Camphor laurel, Mirtekweper	
Evergreen, leaves green above, bluish below, very small cream flowers in clusters followed by reddish fruits in spring. The leaves, bark and twigs have a distinct smell of camphor.	10-20m
<b>Cryptocarya woodii</b>	Lauraceae
Cape laurel, Kaapse kweper	
Medium tree with aromatic foliage, evergreen, fruits black-purple when ripe, good bird plant for wind-free gardens.	5 m
<b>Cryptocarya wyliei</b>	Lauraceae
Red-haired laurel, Rooikweper	
Neat shrub or small tree, leaves green above, bluish below with rusty-coloured hairs, bright red edible fruits in autumn.	3 m
<b>Cunonia capensis</b>	Cunoniaceae
Red alder, Rooiels	
Evergreen, moist conditions, glossy leaves, showy spikes of white flowers, fruit attracts birds, recommended garden tree.	20 - 30 m
<b>Curtisia dentata</b>	Cornaceae
Assegai, Assegai	
Evergreen tree, large glossy leaves, small cream flowers, white fruits, fast-growing, adaptable but frost-tender, attract birds.	6 - 12 m
<b>Cussonia natalensis</b>	Araliaceae
Tall upright single-stemmed tree, cluster of leaves at top, good accent or indoor, plant.	5 m
<b>Cussonia paniculata</b>	Araliaceae
Mountain cabbage tree, Bergkiepersol	
Small tree, ideal for patio planting, good accent plant, drought-tolerant, frost-resistant, suitable for highveld gardens.	3 m
<b>Cussonia paniculata subsp. sinuata</b>	Araliaceae
Mountain cabbage tree, bergkiepersol	
Small tree with attractive blue-grey foliage. Flowers and fruits attract many insects and birds. Frost and drought hardy. Moderate growth rate. Good accent plant. Occurs naturally on Witwatersrand.	5 m

**Cussonia sphaerocephala**

Tall, sparsely branched tree, good container plant, attractive foliage, suitable for large sheltered gardens, evergreen.

Araliaceae

10 m

**Cussonia spicata**

Common cabbage tree, Gewone kiepersol

Very attractive ornamental tree with sculptural shape, bluish green leaves up to 700 mm in diameter, fast-growing, frost-tender.

Araliaceae

5 - 10 m

**Cussonia thyrsoflora**

Cape coast cabbage bush, Kuskiepersol

Low growing shrub, attractive fan-shaped leaves, evergreen.

Araliaceae

5 m

**Cussonia transvaalensis**

Transvaal cabbage tree

Tall, semi-evergreen tree with single stem. Excellent accent plant. Small green flowers from September to February attract insects. Ripe purple fruits are eaten by birds. Drought and frost hardy. Natural to Witwatersrand.

Araliaceae

**Dais cotinifolia**

Pompom tree, Basboom

Small tree, very attractive pink flowers in dense almost spherical heads in masses in mid summer, fast-growing, hardy, an excellent garden subject, ideal for small gardens.

Thymelaeaceae

3-7m

**Dialium schlechteri**

Zulu podberry, Zoeloepeulbessie

Small tree, smooth pale grey mottled bark, shiny foliage, sweetly scented white flowers in spring, velvety red-brown hairs cover fruits.

Fabaceae

5-8m

**Diospyros natalensis**

Small-leaved jackal-berry

A much branched small tree with pale grey, smooth bark and glossy, dark green leaves that are hairy when young. The small, white flowers in late winter are followed by small, acorn-like fruits half covered by a persistent calyx.

Ebenaceae

6m

**Diospyros rotundifolia**

Ebenaceae

Small evergreen tree, dark bark, dark green foliage, small white flowers in summer, attractive red fruits, warm damp coastal gardens.

7 m

**Diospyros scabrida var. cordata**

Ebenaceae

Hard-leaved monkey plum

A small tree with ash-grey bark and almost circular, glossy green leathery leaves that are densely hairy below. The clusters of white flowers in summer are followed by an oval, red, fleshy fruit encased in the persistent calyx.

2-3m

**Diospyros whyteana**

Ebenaceae

Bladdernut, Swartbas.

An attractive small tree with shiny leaves, lantern like inflated fruits and dark bark, evergreen, good bonsai subject, grows well in full sun to light shade, good bonsai subject, recommended. Sow spring or autumn.

2-5 m

**Dombeya cymosa**

Sterculiaceae

Natal wild pear

A small semi-deciduous tree up to 4 m bearing masses of small, pendulous, snow-white flowers. Plant in full sun position.

4 m

**Dombeya rotundifolia**

Sterculiaceae

Common wild pear, Gewone droolpeer

A fast-growing deciduous tree (1 m per year) with a non-aggressive root system covered with creamy-white flowers from July to September, when tree is leafless. Frost hardy. Requires moderate water and full sun.

**Dovyalis longispina**

Flacourtiaceae

Natal dovyalis

Small-medium tree with glossy foliage and orange-red edible fruits. Plant in full sun position. Susceptible to severe frost. Makes excellent security hedge.

**Dovyalis zeyheri**

Flacourtiaceae

Wild apricot

An evergreen, spiny tree, with an open crown, with glossy leaves. Bright orange, fleshy fruit, which attracts birds. Protect young plants from frost. Occurs naturally on the Witwatersrand.

13 m

<b>Dracaena mannii</b>	Dracaenaceae
Small-leaved dragon tree, Kleinblaardrakelboom	
Much branched small tree, smooth whitish bark, marked with leaf scars, dark green narrow shiny leaves, attractive cream flowers in loose spikes, night scented, spring flowering, fruits conspicuous red when mature in early summer.	3-5m
<b>Ekebergia capensis</b>	Meliaceae
Cape ash, Essenhout	
Medium to large evergreen tree, glossy dark green foliage, scented inconspicuous flowers in spring, fleshy pink to bright red berries in late summer, fast growing, frost-tender, a good shade tree.	7-10m
<b>Ekebergia pterophylla</b>	Meliaceae
Rock ash, Rotsessenhout	
Small sturdy evergreen tree, bluish-green leaves, small white fragrant flowers in spring, fleshy berry-like fruit maturing to yellow or red in late summer, full sun, occurs in rocky areas.	3-4m
<b>Englerophytum magalismontanum</b>	Sapotaceae
Transvaal milk plum, Stamvrug	
Hard, evergreen shrub or small tree. Bears small flowers followed by edible, fleshy red fruits directly on the stem. Slow-growing. Prefers some shade when young. Natural on Witwatersrand.	3-10 m
<b>Englerophytum natalense</b>	Sapotaceae
Forest stem-fruit, Natal milkplum	
Small-medium forest tree with lush green foliage. Clusters of white to cream flowers from December to March. Edible red fruits attract birds. Full sun or semi-shade. Good container plant.	6-15 m
<b>Ensete ventricosum</b>	Musaceae
Wild banana, Wildepiesang	
Large fleshy tree, occurring near streams, large banana-like leaves, fast- growing.	12 m
<b>Entandrophragma caudatum</b>	Meliaceae
A large deciduous tree with attractive grey-brown flaking bark and pinnate leaves. The tree is seldom without leaves as the new growth flush appears as soon as the old leaves have dropped. Requires a warm well watered position.	30m

<b>Erythrina caffra</b>	Fabaceae
Coastal erythrina, Kuskoraal boom.	
Large, spreading, deciduous tree with thorny branches and trifoliate leaves, attractive red flowers during winter, outstanding, suitable for gardens with well-drained soil and which do not receive much frost.	9-12 m
<b>Erythrina livingstoniana</b>	Fabaceae
Aloe erythrina	
Medium to large spreading tree, bark with distinctive hard thorny bosses, branches and branchlets covered with thorns, trifoliate leaves, flowers large brilliant scarlet in striking racemes resembling an Aloe flower head, mid summer, sow spring.	10-15m
<b>Erythrina lysistemon</b>	Fabaceae
Common coral tree, Gewone koraalboom	
Medium sized deciduous tree. Scarlet flowers in short dense heads in spring. Hardy, ornamental. Sow in spring.	5-10m
<b>Erythrophysa transvaalensis</b>	Fabaceae
Red balloon tree	
A small tree with smooth, shiny red-brown bark and pinnate leaves crowded at the ends of the branches. Attractive flowers in spring are followed by beautiful large red, inflated seed capsules. The plants respond well to cultivation.	5m
<b>Erythroxylum pictum</b>	Erythroxylaceae
Forest coca tree, Boskokaboom	
Deciduous medium-sized tree. Bears small greenish-white flowers in November to February followed by glossy, ornamental, bright red fruits which are edible and attract birds. Tolerates moderate frost.	10 m
<b>Euclea crispa subsp. crispa</b>	Ebenaceae
Blue guarri, Bloughwarrie	
Dense evergreen spreading tree, glossy dark or bluish green foliage, fragrant white flowers in spring, edible fruit, hardy.	4m
<b>Euclea natalensis</b>	Ebenaceae
Natal guarri, Natal ghwarrie	
Shrub to medium sized slender tree, spreading crown	5 -12m

and drooping habit, shiny olive-green leaves, flowers inconspicuous, evergreen hardy.

**Euclea pseudebenus**

Ebenaceae

Ebony tree, Ebbeboom

Shrub or medium sized tree, drooping branches, leaves narrow leathery grey-green, extremely hardy, slow growing.

3-10m

**Eugenia natalitia (E. capensis subsp. natalitia)**

Myrtaceae

Natal myrtle, Natalmirt.

Usually a small, evergreen tree bearing masses of white fluffy flowers followed by edible red fruit, a suitable substitute for the exotic species.

6 - 8 m

**Eugenia zeyheri (E. capensis subsp. zeyheri)**

Myrtaceae

Wild myrtle

Shrub or small tree, masses of white fluffy flowers followed by edible red berries, attractive, plant in sandy soil, grows well under coastal conditions.

4m

**Faidherbia albida**

Fabaceae

Ana tree, Anaboom

Usually deciduous, fast-growing tree. Pale cream, scented flowers in March to September. Can tolerate moderate frost. Drought hardy. Plant in full sun.

Young branches have zig-zag pattern.

20 m

**Faurea saligna**

Proteaceae

Beechwood, Transvaalboekenhout

Slender graceful tree, long narrow drooping fresh green to yellowish green leaves, red in autumn, young foliage pink, green-white to cream-white flowers in slender spikes during spring, honey scented, sow spring.

7-10 m

**Faurea speciosa**

Proteaceae

Broad-leaved beechwood, Breiëblaarboekenhout

Small leafy tree, leaves thick, glossy green, cream to pink flowers in robust spikes in winter-spring, leaves develop fiery autumn colours, sow spring.

4-7m

**Ficus bizanae**

Moraceae

Pondo fig

Suitable for Cape gardens, fast growing.

10 m

<b>Ficus burtt-davyi</b>	Moraceae
Veld fig, Veldvy	
Attractive shrub, climber or small tree, suitable for hedges and pergolas, also for difficult sandy coastal garden.	5 m
<b>Ficus burtt-davyi 'Cango'</b>	Moraceae
Veld fig, Veldvy	
Attractive shrub or climber, suitable for hedges and pergolas, also for difficult sandy coastal garden.	5 m
<b>Ficus cordata</b>	Moraceae
Namaqua fig, Namakwavy	
Spreading tree, bright green heart-shaped leaves, drought-resistant.	10 m
<b>Ficus craterostoma</b>	Moraceae
Rare forest fig, Bosvy.	
Medium to large tree, ideal for Cape gardens, wind- and drought-resistant, dark green shiny leaves.	10 m
<b>Ficus lutea</b>	Moraceae
Giant leaved fig	
Large spreading tree on river banks, large attractive leaves, very good indoor plant.	25 m
<b>Ficus natalensis</b>	Moraceae
Natal fig, Natalvy	
Evergreen with small leaves, good shade tree for large, subtropical gardens, frost-tender, small figs in spring and summer.	5 - 20 m
<b>Ficus pygmaea</b>	Moraceae
A multi-stemmed dwarf species with oak-shaped leaves and a suckering habit. Likes a very wet position.	1m
<b>Ficus sansibarica</b>	Moraceae
Strangler fig.	
Large tree, thick trunk with pleats and folds, pale grey bark, glossy foliage, large edible figs. Suitable for large gardens and parks. -	15 m
<b>Ficus stuhlmannii</b>	Moraceae
Lowveld fig, Laeveldvy	
A strong fig with white bark, will also grow on its own as a small tree, fruits are a small reddish fig, good bonsai subject.	8 m

<b>Ficus sur</b>	Moraceae
Broom cluster fig, Besemtrosvy	
Spreading evergreen tree, large grey-green leaves, ornamental fruits in heavy clusters, shade tree for large gardens in high rainfall areas.	10 - 18 m
<b>Ficus sycomorus</b>	Moraceae
Sycamore fig, Sycamorusvy	
Large tree with yellowish bark, broad rough leaves, tender to frost.	10 m
<b>Ficus thonningii</b>	Moraceae
Common wild fig, Gewone wildevy	
Large tree, leaves elliptical with parallel sides, ideal for large gardens.	20 m
<b>Ficus trichopoda</b>	Moraceae
Swamp fig	
Attractive tree with large leaves, suitable for indoor containers, should be planted in a moist warm spot of the garden, fast-growing.	8m
<b>Ficus verruculosa</b>	Moraceae
Water fig	
Small tree which grows in association with water, thick glossy leaves and reddish figs, attracts birds.	12m
<b>Galpinia transvaalica</b>	Lythraceae
Wild pride-of-India, Transvaalliguster	
Multi-stemmed shrub or small tree, glossy undulate leaves, young leaves reddish, sprays of fragrant starry cream flowers in autumn, very ornamental, hardy, recommended.	6 m
<b>Gonioma kamassi</b>	Apocynaceae
Kamassi, Kamassie.	
Small, understorey tree suitable for shady gardens, fragrant white flowers.	6 m
<b>Gyrocarpus americanus</b>	Hernandiaceae
Propeller tree	
An unusual tree from the northern regions of SA. Best kept in a container until it becomes too large or can be planted out in warmer areas. Helicopter-like seeds. Drought tolerant but cannot take frost.	

<b>Halleria lucida</b>	Scrophulariaceae
Tree fuchsia, Notsung, Umbinza	
Small tree, evergreen, attractive bright green glossy foliage, orange-red or yellow fuchsia-like flowers in winter-summer, edible black berries, attracts birds, hardy, quick-growing, sow spring. A good tree for a small garden also does well in a pot.	3-5m
<b>Harpephyllum caffrum</b>	Anacardiaceae
Wild plum, Wildepruim	
Evergreen tree, shiny dark green leaves, small white flowers, edible but sour, red fruits in autumn, fast-growing, decorative garden or street tree.	6-10m
<b>Heteromorpha arborescens</b>	Apiaceae
Parsley tree, Wildepietersieliebos.	
Straggling shrub, deciduous, digitate leaves become red to yellow in autumn, hardy.	4 m
<b>Heteromorpha trifoliata</b>	Apiaceae
Parsley tree, Wildepietersieliebos	
Small tree, reddish to purplish-brown smooth bark, peeling in flakes, leaves glossy light or grey-green, yellow-red in autumn, aromatic when crushed, flowers strong-smelling small greenish-white in dense round heads, mid summer, fast growing.	3-7m
<b>Heteropyxis natalensis</b>	Myrtaceae
Lavender tree, Laventelboom	
Small tree, pale grey bark, leaves shiny light green, tiny pale cream-yellow fragrant flowerheads in summer, crushed twigs and leaves strongly aromatic, rich red autumn colours, frost-tender; highly ornamental, recommended.	5-7m
<b>Hexalobus monopetalus</b>	Annonaceae
Shadama plum	
A deciduous shrub or small tree, with very attractive flowers. Velvety brown sepals and cream to pale yellow slender petals give the flower a spidery appearance, from October to November. Fruits are edible.	2-7 m
<b>Heywoodia lucens</b>	Euphorbiaceae
Stink ebony, Stinkebbe hout	
Large decorative forest tree with distinctive peltate	20 m

foliage, when young, good timber tree, suitable for large protected gardens, good container plant when young.

**Homalium dentatum**

Flacourtiaceae

Forest homalium, Bosbastermoerbe

Evergreen, grey smooth bark, yellow to cream flowers.

**Ilex mitis**

Aquifoliaceae

African holly, Without

Medium to large tree, bark smooth very pale grey to light brown, leaves shiny dark green, young leaves reddish, flowers white, scented, in clusters in summer, fruit a crimson berry in winter, edible and sought after by birds; sow autumn or spring.

10-30m

**Kigelia africana**

Bignoniaceae

Sausage tree

An evergreen structural shade tree with large maroon flowers and long fruits.

**Kiggelaria africana**

Flacourtiaceae

Wild peach, Wildeperske

Medium sized well-shaped tree, evergreen, bark pale grey and smooth, darkening and becoming flaky with age, fast growing, recommended garden tree.

4-13m

**Kirkia acuminata**

Simaroubaceae

White syringa, Witsering

Medium sized deciduous tree for warm gardens.

**Kirkia wilmsii**

Simaroubaceae

Mountain seringa

A fast-growing deciduous tree. Plant in a sheltered well-drained position. Protect young trees against frost, for at least the first two years, after which it is frost and drought-resistant.

8 m

**Lonchocarpus capassa**

Fabaceae

Apple-leaf, Appelblaar

Small to medium sized tree, rounded crown and pendulous habit, small fragrant blue-violet 'pea' flowers in sprays in spring, good bushveld tree, tender.

8m

**Loxostylis alata**

Anacardiaceae

Wild pepper tree, Teerhout

Small evergreen tree, pink flowers in panicles.

4 m

<b>Maesa alnifolia</b>	Myrsinaceae
Shrubby tree, covered with little yellow flowers during October, occurs at forest margins along river streams.	2 m
<b>Maesa lanceolata</b>	Myrsinaceae
Brown sap-leaf, Bruinsapblaar	
Large tree, white flowers from November to August.	5m
<b>Maurocenia frangularia</b>	Celastraceae
Aasvoëlbesie.	
Attractive, long-lived, evergreen rounded shrub, leaves dark green, opposite, attractive red coloured young leaves, red berries, suitable for coastal gardens.	
<b>Maytenus acuminata</b>	Celastraceae
Silky bark, Sybas	
Unarmed small tree, evergreen, glossy dark green leaves, clusters of small white to creamy green flowers in summer, attractive orange fruits.	3-8m
<b>Maytenus acuminata 'Silky Showers'</b>	Celastraceae
An attractive tree with long drooping branches clothed with a profusion of small shimmering dark green leaves, reminiscent of a Japanese ornamental tree, young foliage red. Flowers are small but the yellow fruit is attractive.	15 m
<b>Maytenus oleoides</b>	Celastraceae
Klipkershout	
A small, stocky tree with pale grey corky bark and leathery green leaves with a characteristic bluish bloom. Ideal tree for a fynbos garden. Sow in autumn.	4m
<b>Maytenus undata</b>	Celastraceae
Koko tree, Kokoboom	
Shrub or well-branched tree; evergreen; branches without spines; leaves dentate, leathery glossy dark green to grey-green; small pale yellow flowers, red-brown capsules in winter; hardy, drought tolerant, a good garden subject.	2-3m
<b>Millettia grandis</b>	Fabaceae
Umzimbeet, Omsambeet	
Medium sized tree; compound leaves, young leaves and petioles reddish-brown; purple-mauve 'pea' flowers in upright spikes in summer, velvety brown pods; well-shaped decorative shade tree; fast-growing, frost tolerant, sow spring.	7-13m

<b>Millettia sutherlandii</b>	Fabaceae
Giant umzimbeet, Reuseomsambeet	
Large tree; leaves dark green forming a dense crown; deep pink to purple 'pea' flowers in conspicuous sprays in mid summer, followed by large flat woody light brown velvety seed pods.	8-30m
<b>Mimusops caffra</b>	Sapotaceae
Coast red milkwood, Kusrooimelkhout	
Shrub or small to medium sized tree; evergreen; stiffly leathery foliage; whitish star-like flowers followed by bright orange-red edible fruits in winter.	2-3m up to
<b>Mimusops obovata</b>	Sapotaceae
Red milkwood, Rooimelkhout	
Medium to large evergreen tree; shiny dark green leaves; small star-like scented white to cream flowers in spring, followed by bright orange-red edible fruits; suitable for subtropical gardens.	10-20m
<b>Mimusops zeyheri</b>	Sapotaceae
Transvaal red-milkwood, Moepel.	
Medium tree with thick leathery dark leaves, yellow fleshy fruit, occurs in summer rainfall areas.	10 m
<b>Mitriostigma axillare</b>	Rubiaceae
Small false loquat, Basterlukwart	
Compact shrub or small tree, sweetly scented white flowers in spring.	5m
<b>Nuxia floribunda</b>	Loganiaceae
Forest nuxia, Bosvlier.	
A lovely spreading Southern Cape tree with masses of small fragrant white-cream flowers in winter. Plant on sunny slopes, frost tender, a good garden subject.	10m
<b>Ochna natalitia</b>	Ochnaceae
Natal plane, Natalrooihout.	
An attractive small tree, evergreen, prefers light shade, large yellow flowers in spring, berries attract birds. Sow seed immediately.	3-5 m
<b>Ocotea bullata</b>	Lauraceae
Stinkwood, Stinkhout.	
Medium to large tree, fruits acorn-like, yellow-green flowers, damp forest.	8 - 30 m

<b><i>Olea capensis</i> subsp. <i>macrocarpa</i></b>	Oleaceae
Ironwood, Ysterhout	
Evergreen tree, glossy bright green foliage, very small sweetly scented white flowers in lax heads, summer, purple berries attract birds, recommended, sow spring.	2 - 10 m
<b><i>Olea europaea</i> subsp. <i>africana</i></b>	Oleaceae
Wild olive, Olienhout	
Small to medium sized tree, narrow grey-green leaves, small edible olives, hardy, valuable wood, recommended for arid regions.	5-10m
<b><i>Olinia emarginata</i></b>	Oliniaceae
Mountain olinia, Transvaal hard pear, Berghardepeer	
Evergreen tree, glossy dark green foliage, clusters of bright red berries winter, attractive, hardy, recommended garden tree, seed is difficult to germinate.	1-5m
<b><i>Olinia ventosa</i></b>	Oliniaceae
Hard pear, Hardepeer	
Spreading, evergreen tree, leaves glossy dark green above, pale green below, small sweetly-scented white flowers, berry-like pink to red fruits, fast-growing.	10-20m
<b><i>Ozoroa dispar</i></b>	Anacardiaceae
Namaqua resin tree, Namakwaharpuisboom	
Small compact leafy tree, leaves thick leathery conspicuously veined; flowers creamy-white in compact terminal heads in autumn; fruit a large kidney shaped black pod in early summer.	5m
<b><i>Pappea capensis</i></b>	Sapindaceae
Jacket plum, Doppruim	
A neat, evergreen tree. Small greenish-yellow flowers, that attract bees, from January to May. Fruit is a furry green capsule which splits to reveal fleshy, edible red fruits, which attracts birds. Hardy.	7 m
<b><i>Peddiea africana</i></b>	Thymelaeaceae
Green flower tree, Gifolyf	
Small tree, attractive shiny dark green foliage, interesting tubular green flowers, purple berries in late summer, full sun to half shade.	3-5m
<b><i>Peltophorum africanum</i></b>	Fabaceae
Weeping wattle, Huilboom	

Spreading deciduous tree, feathery compound leaves, large sprays of bright yellow flowers in summer, sow spring.	7 m
<b>Phoenix reclinata</b>	Arecaceae
Wild date palm, Wiledadelboom	
Multi-stemmed palm tree, bright orange edible fruit during late summer, adaptable, does well alongside streams.	3 - 6 m
<b>Pittosporum viridiflorum</b>	Pittosporaceae
Pittosporum, Kasuur	
Small tree; brilliant green foliage; small greenish-white to cream scented flowers in summer; fruit a brownish capsule; bark smells like liquorice; worthwhile garden tree.	7-10m
<b>Pleurostyliia capensis</b>	Celastraceae
Coffee pear, Koffiepeer	
Large evergreen tree with lanceolate leaves, grey-green flowers in summer, suitable for full sun or partly shady positions, preferably warm subtropical gardens.	20m
<b>Podocarpus elongatus</b>	Podocarpaceae
Breede River yellowwood, Breëriviergeelhout	
Evergreen tree with blue-green foliage, rounded when mature, hardy, slow-growing.	7m
<b>Podocarpus falcatus</b>	Podocarpaceae
Outeniqua yellowwood, Outeniekwageelhout	
Large tree, evergreen, leaves small and dark green, fleshy yellow fruits, relatively hardy, valuable timber.	30 m
<b>Podocarpus henkelii</b>	Podocarpaceae
Yellowwood, Henkelgeelhout	
Dense evergreen small tree with glossy drooping foliage, attractive.	5 m
<b>Podocarpus latifolius</b>	Podocarpaceae
Real yellowwood, Opregtegeelhout	
Medium to large tree, attractive blue-green foliage.	5-20 m
<b>Prunus africana</b>	Rosaceae
Red stinkwood, Rooistinkhout	
Attractive spreading medium-sized tree, glossy dark green leaves, crushed leaves have a faint smell of almonds, small white fragrant flowers, summer to autumn, fruit pinkish-brown, intensely bitter, summer.	

**Pteleopsis myrtifolia**

Combretaceae

Mirteboswilg

Bushy densely leafy shrub or tree; leaves shiny green; flowers white or creamy yellow strongly scented in few flowered heads in summer-autumn; fruit 2-3 winged light brown in autumn.

3 - 12 m

**Pterocarpus rotundifolius**

Fabaceae

Round-leaved kiat, Dopperkiat

Medium to large tree, deciduous, glossy foliage, covered with yellow flowers in spring, fast growing, tender, good shade tree.

10 - 20 m

**Pterocelastrus tricuspidatus**

Celastraceae

Kershout.

A typical multi-stemmed tree or large shrub of coastal forest and scrub, with glossy green leaves, red when young, with red petioles, creamy white flowers and attractive orange fruits shaped like clumps of pigs trotters. Ideal for a coastal garden.

7m

**Rapanea melanophloeos**

Myrsinaceae

Cape beech, Boekenhout

Smooth grey bark, leaves clusters at end of branches, small greenish flowers June to August, spherical fruit September to March.

4 - 20 m

**Raphia australis**

Arecaceae

Kosi palm.

A naturally occurring palm from around Kosi Bay with a relatively short stem but vast arching leaves up to 18m long. This palm is relatively short lived, flowering after 25 to 35 years and then dying after seed set. Requires a warm well watered position.

**Rauvolfia caffra**

Apocynaceae

Quinine tree, Kinaboom

Small to large tree; grey to brown rough fissured bark; leaves thin, leathery glossy bright green; flowers white sweetly scented in large dense heads in winter-spring; fruit almost spherical black spring-autumn. An ornamental tree, fast growing.

6-20m

**Rhus chirindensis**

Anacardiaceae

Red currant rhus, Bostaaiobos

Multi-stemmed deciduous tree, hardy, found along forest margins or stream banks.

3- 4m up to 6m

<b>Rhus lancea</b>	Anacardiaceae
Karree, Karee	
Small to medium sized evergreen tree; dense drooping dark green crown; sweetly scented small pale greenish-yellow flowers in clusters, shiny brown berries in spring to summer, attracts birds; drought- and frost-tolerant; fast growing; attractive tree.	7m
<b>Rhus leptodictya</b>	Anacardiaceae
Mountain karree, Bergkaree	
Shrub or small tree, evergreen, graceful drooping branches, leaves bright green with serrate margins, berries attract birds, fast-growing, hardy, recommended garden tree.	3-4m
<b>Rhus pendulina</b>	Anacardiaceae
White karree, Witkaree	
Small to medium sized tree, willow-like habit, evergreen, shade tree, fresh green foliage, drooping branches, very hardy, recommended.	9 m
<b>Rhus tenuinervis</b>	Anacardiaceae
Kalahari taaibos, Commiphora rhus	
A well-branched small tree with rounded crown. Minute, yellow flowers borne from January to April, followed by shiny, brown-red, edible fruit in April to June. Fruit attracts birds.	5-8 m
<b>Rothmannia capensis</b>	Rubiaceae
Wild gardenia, Wildekatjiepiering	
Attractive small evergreen tree, leathery leaves, large fragrant cream flowers, speckled inside, spring and summer-flowering, fast-growing, relatively hardy, recommended.	5-14m
<b>Rothmannia globosa</b>	Rubiaceae
Small-flowered rothmannia, Klokkieskattjiepiering	
Attractive evergreen tree, bell-shaped fragrant white flowers with pink marking, easily cultivated, recommended.	5-7m
<b>Salix hirsuta</b>	Salicaceae
Silver willow, Silwerwilger	
Shrub or small spreading tree for wet areas.	

<b>Salix mucronata</b>	Salicaceae
Cape willow, Kaapsewilger	
Shrub or small tree for wet areas.	
<b>Salix subserrata</b>	Salicaceae
Safsaf willow, Safsafwilger	
Shrub or small tree, leaves dark green, small inconspicuous green flowers, spring, fruit from summer-autumn and again in winter, wet areas.	
<b>Schefflera umbellifera</b>	Araliaceae
Basterkiepersol	
Flowers yellowish, forest margins, slender erect tree.	10 m
<b>Schotia afra</b>	Fabaceae
Karoo boer-bean, Karoo-boerboon.	
Small dense tree, often shrubby, red showy flowers, colourful pods, ideal for dry areas.	3 - 5 m
<b>Schotia afra var. afra</b>	Fabaceae
Karoo boer-bean, Karoo-boerboon	
Small dense tree, often shrubby, red showy flowers, colourful pods, ideal for dry areas.	3 - 5 m
<b>Schotia afra var. angustifolia</b>	Fabaceae
Karoo boer-bean, Karoo-boerboon	
Small many branched tree; leaflets very small fine and feathery; showy red flowers in dense panicles in spring; woody oblong pods.	3-5m
<b>Schotia brachypetala</b>	Fabaceae
Weeping boer-bean, Huilboerboon	
Rounded dense tree, semi-deciduous; new growth is bronze, dark green when mature, deep red flowers in dense panicles on the old wood in spring; copious nectar is produced which attracts birds and drips from the flowers; relatively hardy.	5-16m
<b>Schotia latifolia</b>	Fabaceae
Bush boer-bean, Bosboerboon	
Slender tree, leaves leathery grey to green, flowers pink to whitish, summer, fruit an attractive flattened pod, suitable for dry stony areas as well as coastal gardens.	3-10 m
<b>Schrebera alata</b>	Oleaceae
Tree jasmine, Wildejasmyn	
Graceful tree, sweetly scented white flowers in summer, fast growing, attractive needs shelter from the wind.	8 m

<b>Sclerocarya birrea subsp. caffra</b>	Anacardiaceae
Marula, Maroela	
Distinctive bushveld tree with edible fruits, attractive rounded crown, suitable for warm sheltered gardens.	10 m
<b>Scolopia mundii</b>	Flacourtiaceae
Red pear, Rooipeer	
Small spiny tree, orange fruit, coastal forest.	10 m
<b>Scolopia zeyheri</b>	Flacourtiaceae
Thorn pear, Doringpeer	
Medium-large tree with glossy, evergreen foliage. New leaves often reddish. Bears white flowers from April to September. Frost hardy. Plant in full sun or semi-shade.	7 m
<b>Senna petersiana</b>	Fabaceae
Monkey pod, Apiespeul	
Graceful tree or bushy shrub, dense rounded crown, glossy dark green foliage, large showy sprays of dark yellow flowers, late summer, easily cultivated, sow spring.	3 - 8 m
<b>Sideroxylon inerme</b>	Sapotaceae
Milkwood, Melkhout	
Grows in coastal woodland forming dense thickets, bark brown to black, evergreen, leaves simple, dark green above, light green below, flowers greenish-white, January to July, fruit July to January, wind-resistant.	5 - 10 m
<b>Spathodea campanulata</b>	Bignoniaceae
African flame	
A beautiful shade tree with large leaves and striking huge red flowers.	
<b>Steganotaenia araliacea</b>	Apiaceae
Carrot tree, Geelwortelboom	
A small erect sparsely branched shrub or tree. All parts of the tree smell of carrots. Small green-white flowers borne in umbels from August to October followed by heart-shaped fruit. Attracts birds.	2-7 m
<b>Sterculia alexandri</b>	Sterculiaceae
Kaapse kastaiing	
Small tree with horizontal branches and greenish flowers in winter, river banks in Eastern Cape, rare.	

<b>Sterculia murex</b>	Sterculiaceae
Lowveld chestnut, Laeveldekastaiing	
Deciduous, frost-tender, large palmate leaves.	8 m
<b>Strelitzia alba</b>	Strelitziaceae
Cape wild banana, Kaapse wildepiesang	
Large leaves, flowers entirely white, frost-sensitive.	10 m
<b>Strelitzia caudata</b>	Strelitziaceae
Transvaal wild banana, Transvaalse Wildepiesang	
Similar to <i>Strelitzia alba</i> in size and appearance but flowers blue.	10 m
<b>Strelitzia nicolai</b>	Strelitziaceae
Natal wild banana, Nataalse wildepiesang	
Very large banana-palm-like leaves, large 'bird of paradise' flowers are white and purple, good accent plant, relatively tender.	7 m
<b>Strychnos decussata</b>	Loganiaceae
Cape teak, Kaapse kiaat	
Small slender tree, drooping densely leaved branches, glossy, dark-green smooth leathery leaves, orange-red fruit.	10 m
<b>Strychnos madagascariensis</b>	Loganiaceae
Makwakwa, Swartklapper	
Small shrubby tree, evergreen, distinctive pendulous 6 m habit, edible fruit, important food plant in Maputaland.	
<b>Syzygium cordatum</b>	Myrtaceae
Waterbessie	
Evergreen, attractive blueish-green leaves, creamy-white to pinkish sweetly-scented flowers, summer, deep purple edible fruit in autumn, wind tolerant.	5 - 10 m
<b>Syzygium gerrardii</b>	Myrtaceae
Waterberry, Boswaterhout	
Young leaves, purplish-red, compact habit, good specimen tree, suitable for coastal gardens, evergreen, fast growing, recommended.	9 m
<b>Syzygium guineense</b>	Myrtaceae
Woodland waterberry, Waterpeer.	
Attractive compact tree, well suited to coastal conditions, a good alternative to exotic species of <i>Eugenia</i> , a good tree for birds, recommended.	5 - 10 m

<b>Syzygium pondoense</b>	Myrtaceae
Pondo waterwood, Pondowaterhout.	
Shrub or small tree, rounded leaves strongly aromatic, flowers yellowish to cream August to February, fruit January to October, good garden subject.	3 m
<b>Tabernaemontana elegans</b>	Apocynaceae
Toad tree	
A small tree, attractive creamy-grey fissured bark; large, glossy green leaves. Large, sweetly scented, white flowers, summer; characteristic green, toad-like fruit. Suitable for a large pot in partial shade or a warm sheltered garden.	3-5m
<b>Tapiphyllum parvifolium</b>	Rubiaceae
Mountain medlar, Bergmispel	
Small branched deciduous tree, young leaves reddish, edible brownish fruits in autumn, flowers yellow-green, inconspicuous.	3 m
<b>Tarchonanthus camphoratus</b>	Asteraceae
Wild camphor tree, kanferboom.	
A very hardy small tree with aromatic camphor scented foliage and white woolly flowers. Low maintenance warm slopes. Full sun.	8m
<b>Tarchonanthus trilobus</b>	Asteraceae
Camphor tree, Kanferboom	
A small tree, leaves strongly aromatic, dark green, 3-lobed at tips, flowers yellowish to cream, during summer, woolly fruits through winter, good garden subject.	8m
<b>Terminalia phanerophlebia</b>	Combretaceae
Lebombo terminalia, Lebombotrosblaar	
A shrub or small tree. White, creamy flowers, tinged with pink, from October to February followed by greenish-yellow fruit (20 mm). Attracts birds.	6 m
<b>Terminalia sericea</b>	Combretaceae
Silver terminalia, Vaalboom	
Well shaped tree; dark grey or brownish bark deeply vertically fissured; leaves pale green covered with silvery silky hairs giving off characteristic sheen; small cream to pale yellow flowers in axillary spikes in spring to summer; fruits pink to red.	4-6m

<b>Thespesia acutiloba</b>	Malvaceae
Wild tulip tree, Wildetulpboom	
A shrub or small tree. Showy, yellow flowers (60 mm) from January to April. Spherical red fruit (20 mm) in February to June. A good garden subject.	3 -4 m
<b>Trema orientalis</b>	Ulmaceae
Fast growing shade tree, soft deciduous foliage, relatively frost-hardy.	3 m
<b>Tricalysia lanceolata</b>	Rubiaceae
Common tricalysia, Jakkals koffie	
Small tree up to 3 m, with glossy, evergreen foliage. Small white, sweetly scented flowers from October to November, followed by small black fruits, that attract birds. Protect from frost when young. Full sun to shade.	3 m
<b>Trichilia dregeana</b>	Meliaceae
Forest mahogany, Bosrooi-essenhout, Mafoureira.	
Attractive large evergreen tree for warm gardens.	30 m
<b>Trichilia emetica</b>	Meliaceae
Natal mahogany, Rooi essenhout.	
Attractive large evergreen tree for warm gardens.	
<b>Vangueria esculenta</b>	Rubiaceae
Forest wild medlar, Blinkblaarmispel	
Small tree or shrub, deciduous, sweet-scented yellow-green flowers in early summer, pendulous clusters of edible yellow-brown fruits in summer, sow	8 m
<b>Vangueria infausta</b>	Rubiaceae
Wild medlar, Wildemispel	
Small tree, smooth grey bark, leaves covered with soft golden hairs, flowers greenish-white to yellowish in clusters in spring, yellow-brown fruits in late summer, sow spring.	3-7m
<b>Vepri lanceolata</b>	Rutaceae
White ironwood, Witysterhout	
Small evergreen tree, leaves trifoliate, strongly lemon scented when crushed, markedly wavy, flowers inconspicuous, summer, fruit smooth black berries in winter, tidy growth form, sensitive to frost, recommended as small tree in warm areas.	3-5m

<b>Virgilia divaricata</b>	Fabaceae
Pink blossom tree, Pienk Keurboom	
Medium sized evergreen tree, compound leaves, rose-pink 'pea' flowers in sprays in spring, very decorative, fast-growing, good garden tree, soak seed in boiling water before sowing.	8 m
<b>Virgilia oroboides</b>	Fabaceae
Blossom tree, Keurboom	
Evergreen, fast-growing, grey-green leaves, pale pink flowers in sprays in summer, soak seed before sowing.	8 - 13 m
<b>Vitellariopsis dispar</b>	Sapotaceae
Tugela milkwood, Tugela bastermelkhout	
Shrub or medium sized tree, attractive foliage, evergreen, yellow fruits, bird plant, suitable for sheltered warm gardens.	5 m
<b>Vitellariopsis marginata</b>	Sapotaceae
Natal bush milkwood, Natalbosmelkhout	
Medium to large evergreen tree, for frost-free subtropical gardens, fruit is a purple-red berry.	8 - 10 m
<b>Voacanga thouarsii</b>	Apocynaceae
Wild frangipani	
A rounded tree with leaves crowded near the ends of the branches and strongly scented white flowers that fade to yellow in late Spring.	5-15m
<b>Warburgia salutaris</b>	Canellaceae
Pepper-bark tree	
Spreading evergreen tree, leaves aromatic with peppery taste, flowers white, solitary, fruit a black berry, for moist subtropical gardens, popular medicinal tree in South Africa, water freely during summer, very rare.	5-10m
<b>Widdringtonia cedarbergensis</b>	Cupressaceae
Clanwilliam cedar, Clanwilliamseder	
Rare. Medium sized evergreen tree, reddish-grey flaking bark, needle-like foliage, woody warty dark brown cones, beautiful timber, almost made extinct by excessive cutting and veld fires, now being re-established, sow autumn.	5-7m

**Widdringtonia nodiflora**

Cupressaceae

Mountain cypress, Bergsipres

Small evergreen tree, fresh green needle-like foliage, dark brown cones, fragrant wood, grows well in containers, upright growth form, sow spring or autumn.

4-6 m

**Widdringtonia schwarzii**

Cupressaceae

Willowmore cedar, Baviaanskloofseder.

Large evergreen conifer, slender growth form while young, spreading when mature, slow growing, female cones woody and attractive, recommended for large, rocky gardens.

10 m

**Zanthoxylum capense**

Rutaceae

Small knobwood

Small evergreen much-branched tree, spine tipped knobs on trunk, aromatic citrus-scented glossy leaves, clusters of scented cream flowers in summer, orange-red fruits.

4 m

**Ziziphus mucronata**

Rhamnaceae

Buffalo thorn, Blinkblaar-wag-n-bietjie

Deciduous thorny tree, fragrant inconspicuous cream flowers, shiny russet-red fruits often remaining on the tree over winter, recommended garden tree.

7-10m

**Ziziphus rivularis**

Rhamnaceae

False buffalo thorn, Vals wag-n-bietjie

Shrub or small unarmd tree, smooth grey bark, inconspicuous yellow flowers in compact heads, in summer, dark brown sperical fruits in mid summer, sow spring

5m



JEANETTE LOEDOLFF

## GROUND COVERS AND BANK STABILISATION

Ground covers are spreading plants that cover the soil surface. This spreading plant growth is not only attractive but very practical in that it:

- suppresses weeds
- stabilizes the soil from washing or blowing away
- retains soil moisture.

A wide variety of plants can be used for this purpose:

- some are very vigorous with each plant covering a large area eg *Arctotis stoechadifolia*,
- some root where ever they touch the soil creating a very thick mat that is ideal for retaining steep slopes eg *Monopsis lutea*
- some work well as a low growing mass planting eg *Agathosma ovata* 'Kluitjieskraal'
- others send out underground suckers forming a dense barrier eg *Plumbago auriculata*.



- The selection of what species you use and how you position them is dependent on:

- whether you like the plant
- the purpose of the plant
- environmental conditions of the site.

The majority of ground-covers are fast growing and hence require good feeding, the exceptions being some of the fynbos species. So the soil must be well prepared with plentiful compost and balanced slow release fertilizer before planting.

### Bank Stabilization

Sloping gardens can either be terraced using retaining walls or the slopes can be stabilized with suitable plantings. Plants are the ideal way of stabilizing soil on a slope and stopping erosion and wash ways. Not only do their roots bind and hold the soil but they provide a beautiful pattern of colour and texture.

On all slopes the soil needs to be prepared well with plentiful compost and a balanced slow release fertilizer. On steep slopes (steeper than about 15°) some additional retaining is required. Either rocks or logs in horizontal retaining lines can be used. Rocks can be grouped attractively into naturalistic clusters to create an informal rockery, the steeper the slope the greater the number of rocks required. Logs need to be pegged onto the slope using wooden or steel pegs. By running these logs at a slight angle drainage lines across the slope can be created leading the water to one side.

The prepared slopes can just be seeded with a suitable mixture of local indigenous seed, planted with selected plant species or a combination of the two methods can be used.

If seed is going to be used, scatter the seed over the slope before mulching and rake in lightly.

To hold the soil in place, preventing erosion, and to retain moisture cover the slope with a thick layer of mulch. Plants can then be planted through the mulch.

Ground-covers make ideal plants for stabilising the soil surface on slopes and must be selected with the site in mind as well as the look one wishes to create. Larger filler and feature plants with a longer life and binding roots should be established with the ground-covers for the best long term effect.

#### Proteaceae

*Diastella buekii*

#### Shrubs

*Agathosma ovata* 'Kluitjieskraal'

*Agathosma serpyllacea*

*Barleria obtusa* 'Blue'

*Barleria obtusa* 'Pink'

*Carissa* 'Green Carpet'

*Diospyros austro-africana*

*Eriocephalus africanus*

*Phyllica ericoides*

*Plumbago auriculata*

*Salvia africana-caerulea*

*Tecomaria capensis*

*Vernonia mespilifolia*

#### Herbaceous Perennial

*Alchemilla capensis*

*Arctotis hybrid*

*Arctotis acaulis* 'Pink'

*Arctotis acaulis* 'Yellow'

*Arctotis steoachidifolia*

*Arctotis acaulis* 'Red'

*Asparagus densiflorus* 'Owebe'

*Asparagus densiflorus* 'Mazeppa'

*Asparagus densiflorus* 'Flagstaff'

*Asparagus densiflorus* 'Meyersii'

*Asystasia gangetica*

*Barleria repens*

*Chrysanthemoides incana*

*Cineraria saxifraga*

*Cliffortia ferruginea*

*Cliffortia odorata*

*Cenia turbinata* (*Cotula tubinata*)

*Diascia integerrima*

*Diascia mollis*

*Dymondia margaretae*

*Eumorphia prostrata*

*Felicia aethiopica*

*Ficinia truncata*

*Gazania* 'Pink'

*Gazania krebsiana*

*Gazania rigens* var *rigens*

*Gazania rigens* var *uniflora*

*Geranium incanum*

*Helichrysum teretifolium*

*Helichrysum argyrophyllum*

*Helichrysum chionosphaerum*

*Helichrysum cymosum*

*Helichrysum sutherlandii*

*Hermannia saccifera*

*Leysera gnaphaloides*

*Limonium perigrinum*

*Lobelia anceps* (L. *alata*)

*Monopsis lutea*

*Monopsis unidentata*

*Osteospermum caulescens*

*Osteospermum eckloni*

*Osteospermum fruticosum*

*Osteospermum jucundum*

*Pelargonium peltatum*

*Pelargonium suburbanum* ssp

*suburbanum*

*Pelargonium tomentosum*

*Plecostachys serpyllifolia*

*Plectranthus ciliatus* 'Drege'

*Plectranthus ciliatus* 'Richard'  
*Plectranthus hadiensis* var *tomentosus*  
 'Mamba'  
*Plectranthus hadiensis* var *woodii*  
*Plectranthus madagascariensis* var  
*ramosior*  
*Plectranthus madagascariensis* var  
*madagascariensis*  
*Plectranthus neochilus* 'Siteki'  
*Plectranthus strigosus* 'Albert'  
*Plectranthus strigosus* 'Bulolwe'  
*Scabiosa incisa*  
*Senecio tanacetopsis*  
*Sutera cordata*  
 Bulbous Plants  
*Agapanthus nana* 'Blue'  
*Agapanthus nana* 'White'  
*Agapanthus praecox* 'Dwarf Blue'  
*Agapanthus praecox* (White)  
 Succulents  
*Carpobrotus* spp.  
*Crassula coccinea*  
*Crassula expansa*  
*Crassula multicava*  
*Crassula spathulata*  
*Delosperma* spp.  
*Drosanthemum* spp.  
*Lampranthus* spp.

## GARDENING WITH CONTAINERS

### A potted history

Archaeological records from Malta show that the use of ceramics dates to at least 2000 BC, but the tradition of pottery may well have been associated with human since they gained control of fire. Early records from the Mediterranean, the home of pottery, suggest the use of pottery for plant containers (Terracotta is a word of Latin origin).

In the tomb of Rameses (1186 BC) evidence of pots was found, very likely for growing citrus varieties from the East. From Egypt, the Romans took pottery to the European mainland where both climate and architecture lend themselves to the roof- and pleasure-gardens one may still see today.

In Asia the commercialisation was evident around 918 BC. Itinerant peddlers sold flowering bulbs in pots to householders, then withdrew them once flowering was over, bringing a supply of new ones in an exchange: much like the 'Rent-A-Pot-Plant' trade of today.

Pottery 'declined' with the fall of the Roman Empire but persisted through the Middle Ages, particularly in the monasteries where herbs were cultivated in containers.

One of the more intriguing Renaissance pot designs was a hinged, wooden pot allowing easy removal of the contained plant for planting out in the field during the summer months. It also permitted its easy repotting in autumn, to avoid the cold winter. In Victorian times, 'orangeries' were popular and citrus plants were often planted out for summer

and lifted for winter. Large, horse-drawn, flat-bed trailers were used to move these citrus trees in and out of the orangeries.

## Pots

Nowadays most pots are plastic but terracotta is still the preferred material, especially for species which are difficult to grow. It is the most predictable substance, non-toxic, easy to 'plunge' and plant-friendly. Asbestos pots must be kept well painted to prevent fibres escaping, whilst wine barrels (often fibreglass-coated to make them more durable) make wonderful containers.

## The purpose of using pots

Space is a premium in many and plant prices are escalating. With pots one has enhanced control over the condition and positioning of the plant. (This is important in the S.W.Cape where winter north-west and summer south-east winds take their toll). Pests are easier to control since a single affected pot may be removed and treated individually. Mobile gardeners may take their plants along when they move house and pots may be changed at whim to suit one's mood and lifestyle. Container plants are less time consuming than one thinks. If one plans well, one can grow a lovely garden (with no lawn to mow).

## Pot places

Containers may be placed in courtyards, atriums or next to pillars, as barriers for demarcating an area, next to footpaths as a display or on balconies.

## Hints and tips

When your plant has become root-bound, i.e. the roots are beginning to

show through the drainage holes in the bottom of the pot, it is ready for repotting. Gently loosen the root-ball from the container and pot it into the 'next-size-up' container.

The extra soil required to fill the pot must be fresh, and it is preferable to disturb the roots as little as possible. Plants can only control as much soil as root growth will allow. Giving them too much soil can cause them to 'sulk' as the soil becomes anaerobic and stale and a plant regresses rather than progresses. Hence, it is not a good idea to place a small plant in a much larger pot than it can manage.

It is advisable, for plants which you intend 'growing-on', to pot them into containers which are tapered and from which the root-ball may easily be removed. This means that the container may be re-used and also that the plant is less likely to suffer damage en route.

## Plants for pots

### Shade

- Many *Plectranthus* species are superb pot specimens, e.g. *P. veticillatus* and *P. strigosus* are perfect for hanging baskets, giving colourful displays in autumn when little else is in flower.
- *Asparagus* species make ideal pot-plants though they tend to outgrow the container fairly fast, but there is no reason you should not be able to grow them. They require full-shade and good drainage.

### Fynbos

It may surprise you that many fynbos species make good pot-plants.

- Restionaceae, e.g. *Chondropetalum*

and *Elegia* species, make striking feature plants.

- *Buchus*, many of which are short-lived, are nonetheless valuable pot specimens. *Acmadenia species* are all good for containers whilst *Agathosma ovata*, with its compact form and masses of pink flowers is a must.
- Many of the *Erica* species are well suited to pot culture. *Erica nana* and *E. blenna*, amongst others, will delight you with their compact growth form and gorgeous flowers.
- For potting soil which will favour the best results, use 'Kirstenbosch fynbos mix' for your fynbos plants. The drainage and pH emulate the sandy, acid soil in which most fynbos thrives.

### *Pelargoniums*

For foliage interest, lovely flowers and in some cases a challenge to your skills, the Geraniaceae will provide a wealth of container plants. In many instances the species are more striking than the hybrids.

- *Pelargonium crispum* has lemon-scented foliage, pink flowers and a compact growth habit.
- *P. echinatum*, is a succulent species, with attractive bicolour flowers.
- *P. fulgidum*, flowering at the end of winter, makes an impressive show of red flowers.
- *P. tricolor*, a plant everyone desires, is most beautiful, with its close, alpine growth habit and profusion of flowers in September/October. This is a species to graduate to since it demands a clear understanding of plant requirements. Numerous colour forms exist.

### *Larger specimens*

- *Melanthus major*, (kruidjie-roer-my-nie) is a fast-growing container plant with foliage interest.
- *Acridocarpus* and *Ochna* species are large shrubs, with glossy leaves and yellow flowers, suitable as pot specimens.

### *Succulents*

These make good container plants, benefiting from under-watering rather than from too much water.

- The small aloes, such as *Aloe humilis* and *A. variegata*, flower well in pots.
- Mesembryanthemums, such as *Conophytum* and *Drosanthemum* spp. are easy to grow and will brighten up your full sun patio.

### *Bulbs*

Bulbs are perfect as pot-plants since the dormant plant may simply be removed from view until flowering starts again. For instant bulb displays in your garden, simply place bulbs in their pot or container straight into the ground. The pot may be lifted from the garden display once flowering is over.

- *Amaryllis* and *Babiana*, *Clivia* and *Crinum*, *Crysanthus* and *Freesia*, *Geissorhiza* and *Galaxia* (the civil servant plant, opens at 9am and closes at 4pm), *Gladiolus* and *Ixia*, *Lochenalia* and *Lapeirousia*, *Moraea* and *Ornithogalum*, *Romulea* and *Veltheimia* are all indigenous bulbs which will startle and delight you with various leaf and flower forms, colours and flowering times.

### **Concluding containers**

If you try to understand, and to emulate

the habitat from whence a species originates, your ability to successfully grow it will be greatly enhanced. For example, some species need shade: other bright sunlight, some need to be kept wet during summer but dry in winter, and other require the reverse. Read up about various plants which you can own and find out their specific requirements.

It is often easier to control the micro-climate of a pot-grown plant than that of plants grown in a mixed shrubbery. Give individual attention to soil, watering, light and the nutritional needs of each species. Find out what your plant needs, seek out a niche in your home to suite the requirements and you will be rewarded with pure potting pleasure.

#### Ericas

*Erica cubica*  
*Erica curvirostris*  
*Erica dianthifolia*  
*Erica fontana*  
*Erica georgica*  
*Erica haematocodon*  
*Erica hirtiflora*  
*Erica lateralis*  
*Erica leucantha*  
*Erica perspicua*  
*Erica regia*  
*Erica retorta*  
*Erica spectabilis*  
*Erica tenuis*  
*Erica veratricosa*  
*Erica versicolor*  
 Restios  
*Chondropetalum tectorum*  
*Rhodocoma capensis*  
*Thamnochortus cinereus***Climbers**  
*Jasminum multipartitum* (rambler)  
*Senecio macroglossus*

#### Trees / Bome

*Celtis africana*  
*Curtisia dentata*  
*Cussonia natalensis*  
*Cussonia paniculata*  
*Cussonia spicata*  
*Diospyros rotundifolia*  
*Diospyros whyteana*  
*Dombeya pulchra*  
*Dombeya tiliacea*  
*Encephalartos caffer*  
*Encephalartos cycadifolius*  
*Encephalartos princeps*  
*Encephalartos villosus*  
*Euclea natalensis*  
*Eugenia natalitia* (*E. capensis* subsp *natalitia*)  
*Ficus natalensis*  
*Garcinia gerrardii*  
*Halleria lucida*  
*Heteropyxis natalensis*  
*Heywoodia lucens*  
*Maurocena frangularia*  
*Ochna natalitia*  
*Olea europaea* subsp *africana*  
*Pavetta lanceolata*  
*Peddiea africana*  
*Podocarpus elongatus*  
*Podocarpus falcatus*  
*Podocarpus henkelii*  
*Podocarpus latifolius*  
*Rapanea melanophloeos*  
*Sparrmannia africana*  
 Shrubs  
*Acmaenia heterophylla*  
*Agathosma apiculata*  
*Agathosma ciliaris*  
*Agathosma collina*  
*Agathosma ovata* 'Igoda'  
*Agathosma ovata* 'Kluitjieskraal'  
*Agathosma ovata* 'Witteklip'  
*Agathosma serpyllacea*  
*Anastrabe integerrima*

*Anisodonteia capensis*  
*Anisodonteia scabrosa*  
*Barleria obtusa*  
*Bauhinia natalensis*  
*Bauhinia tomentosa*  
*Coleonema album*  
*Halleria elliptica*  
*Oxyanthus speciosus* subsp. *gerrardii*  
*Plumbago auriculata*  
*Polygala myrtifolia*  
*Strelitzia juncea*  
*Strelitzia reginae* (orange)  
*Strelitzia reginae* 'Mandela's Gold'  
*Tecomaria capensis*  
 Herbaceous Perennial  
*Asparagus densiflorus*  
*Becium obovatum*  
*Chironia laxa*  
*Cineraria saxifraga*  
*Cenia turbinata* (*Cotula tubinata*)  
*Diascia* spp.  
*Eumorphia prostrata*  
*Euryops annae*  
*Felicia aethiopica*  
*Felicia amelloides* 'White'  
*Gazania* 'Pink'  
*Gazania krebsiana*  
*Helichrysum argyrophyllum*  
*Helichrysum chionosphaerum*  
*Helichrysum cymosum*  
*Helichrysum petiolare* 'Limelight'  
*Helichrysum sutherlandii*  
*Hermannia saccifera*  
*Impatiens sylvicola*  
*Lobelia anceps* (L. *alata*)  
*Monopsis lutea*  
*Monopsis unidentata*  
*Nemesia fruiticans*  
*Pelargonium betulinum*  
*Pelargonium abrotanifolium*  
*Pelargonium cordifolium*  
*Pelargonium exstipulatum*  
*Pelargonium fruticosum*

*Pelargonium greytonense*  
*Pelargonium ionidiflora*  
*Pelargonium peltatum*  
*Pelargonium reniforme*  
*Pelargonium tomentosum*  
*Plectranthus ciliatus* 'Bingham'  
*Plectranthus neochilus* 'Siteki'  
*Plectranthus oertendahlii*  
*Plectranthus saccatus* var. *longitubus*  
*Plectranthus saccatus* var. *saccatus*  
*Plectranthus strigosus* 'Bulolwe'  
*Scabiosa incisa*  
*Senecio tanacetopsis*  
*Sutera cordata*  
 Bulbous Plants  
*Agapanthus nana* 'Blue'  
*Agapanthus nana* 'White'  
*Agapanthus praecox* 'Dwarf Blue'  
*Agapanthus praecox* (White)  
*Babiana* spp.  
*Clivia miniata*  
*Cyrtanthus* spp.  
*Drimiopsis maculata*  
*Freesia* spp.  
*Geissorhiza* spp.  
*Gladiolus* spp.  
*Lachenalia* spp.  
*Moraea* spp.  
*Nerine* spp.  
*Ornithogalum* spp.  
*Scadoxus multiflorus* subsp. *katharinae*  
*Scadoxus puniceus*  
*Veltheimia bracteata*  
*Zantedeschia aethiopica*  
 Succulents  
*Adromischus* spp.  
*Aloe aristata*  
*Aloe plicatilis*  
*Aloe striata*  
*Aloe tenuior*  
*Anacampseros* spp.  
*Cheiridopsis* spp.  
*Conophytum* spp.

*Cotyledon* spp.  
*Faucaria* spp.  
*Gasteria* spp.  
*Haworthia* spp.  
*Lithops* spp.  
*Oophytum* spp.  
*Portulacaria afra*  
 Ferns  
*Adiantum capillus-veneris*  
*Adiantum hispidulum*  
*Asplenium inaequilaterale*  
*Asplenium lobatum*  
*Blechnum punctulatum*  
*Cleistanthus viridis*  
*Macrothelypteryx torresiana*  
*Stenochlaena tenuifolia*  
*Tectaria gemmifera*  
*Thelypteris* spp.

## GARDENING WITH BIRDS

One of the beauties of an established garden is the birdlife that it attracts. Even in suburbia a rich and enticing garden is always abustle with bird life. Birds like a garden that provides them with shelter, in which to hide and build their nests. A good supply of food is always an attraction and the wider the variety of food the wider the variety of birds. The wider the variety of plants the wider the variety of food.

Plants with nectar rich flowers e.g. Aloes and *Tecomaria capensis* attract not only the nectar feeding birds like sun birds but also birds that feed on the insects that are feeding on nectar e.g. White eyes.

A garden full of seed bearing grasses attracts cheerful little fellows like waxbills in their chattering flock.

Fruit of any kind attracts a wide range of fruit eating birds. Who in exchange for what they eat normally leave the seeds of something else.

It is important to remember that a garden friendly to wildlife must be free of poisons. Not only do these poisons kill birds they remove the potential food of some of these birds. There is no need to spray for pests if there is a bird that will eat it for you. A garden with well developed dense shrubberies will attract Robins, Bok-makries, Thrush and Coucals which will put the end to snails, slugs, caterpillars etc.

The dawn and evening song of birds declaring your garden as their territory is one of the many rewards of a wildlife friendly garden.



ProteaS	<i>Vepris lanceolata</i> (V <i>undulata</i> )
<i>Leucospermum</i> spp.	Shrubs
<i>Protea</i> spp.	<i>Bauhinia</i> spp.
<i>Ericaceae</i>	<i>Burchellia bubalina</i>
<i>Erica bauera</i>	<i>Carissa</i> spp.
<i>Erica mammosa</i>	<i>Chrysanthemoides monillifera</i>
<i>Erica pinea</i>	<i>Diospyros austro-africana</i>
<i>Erica regia</i>	<i>Duvernoia adhatodoides</i>
<i>Erica versicolor</i>	<i>Freylinia</i> spp.
<i>Erica verticillata</i>	<i>Nylandtia spinosa</i>
Restios	<i>Rhus</i> spp.
<i>Calopsis paniculata</i>	<i>Strelitzia juncea</i>
<i>Rhodocoma capensis</i>	<i>Strelitzia reginae</i>
<i>Rhodocoma gigantea</i>	<i>Tecomaria capensis</i>
<i>Thamnochortus insignis</i>	Herbaceous Perennial
Climbers	<i>Asparagus densiflorus</i>
<i>Podranea ricasoliana</i>	<i>Chrysanthemoides incana</i>
Trees	<i>Hypoestes aristata</i>
<i>Apodytes dimidiata</i>	<i>Leonotis leonurus</i>
<i>Apodytes</i> sp. nova	<i>Pycnostachys urticifolia</i>
<i>Bauhinia galpinii</i>	<i>Sutherlandia frutescens</i>
<i>Bauhinia petersiana</i>	Bulbous Plants
<i>Calodendrum capense</i>	<i>Agapanthus</i> spp.
<i>Cassine aethiopica</i>	<i>Aristea major</i>
<i>Cassine peragua</i>	<i>Brunsvigia orientalis</i>
<i>Diospyros</i> spp.	<i>Clivia miniata</i>
<i>Dovyalis caffra</i>	<i>Crinum bulbispermum</i>
<i>Ekebergia capensis</i>	<i>Crinum macowanii</i>
<i>Euclea natalensis</i>	<i>Kniphofia</i> spp.
<i>Eugenia natalitia</i> (E <i>capensis</i> subsp <i>natalitia</i> )	<i>Scadoxus multiflorus</i> subsp <i>katharinae</i>
<i>Grewia occidentalis</i>	<i>Scadoxus puniceus</i>
<i>Greyia</i> spp.	<i>Veltheimia bracteata</i>
<i>Halleria lucida</i>	<i>Watsonia</i> spp.
<i>Ochna natalitia</i>	Succulents
<i>Peddiea africana</i>	<i>Aloe</i> spp.
<i>Phoenix reclinata</i>	<i>Cotyledon</i> spp.
<i>Podocarpus</i> spp.	<i>Gasteria</i> spp.
<i>Psychotria capensis</i>	<i>Tylecodon</i> spp.
<i>Rapanea melanophloeos</i>	
<i>Rhus</i> spp.	
<i>Sideroxylon inerme</i>	
<i>Syzgium</i> spp.	

# WATER - WISE GARDENING

## **A responsible choice**

If you adopt a water-wise way of life and encourage your family and friends to do the same, there will be more water to go round. It will delay the need for building new dams, saving both money and the environment.

## **The basic principles of Water-wise Gardening**

### *Grow water-wise plants*

There are many attractive garden plants which need no additional watering once established. We call these water-wise plants.

Choose plants which are adapted to local conditions. In the Western Cape, water-wise plants are those which are adapted to long, dry, windy summers and winter rainfall. They survive the summer by storing water, reducing water loss through the leaves or by going underground.

### *Group plants according to their water needs*

Many popular garden plants need regular watering in summer. These water-thirsty plants should be grouped together in a small area close to the house, where their needs can be attended to. On the other hand water-wise plants need very little watering once established. Consider using such plants in the rest of your garden.

### *Prepare the soil*

- Whatever your soil type (sand, clay or loam) you can improve its water holding capacity by adding compost. In clay soils this also improves water penetration and aeration. Compost enriches the soil with nutrients and encourages earthworm activity, which improves soil aeration and drainage.
- It is most economical to make compost yourself (using kitchen waste and garden refuse), but inexpensive compost can be bought from various municipalities.
- Prepare the bed thoroughly before planting by digging in large amounts of compost.
- Healthy plants require less water. Appropriate amounts of organic or inorganic fertiliser will make your plants flourish and use less water.
- Soil improvement is an ongoing process. Flower beds should be composted at least once a year.

### *Much more mulch*

- Mulch is a thick layer of organic or inorganic material covering the soil.  
Mulch
  - helps to keep the soil cool
  - reduces water evaporation
  - it suppresses the growth of weed
  - it reduces water runoff and soil erosion.
  - organic mulches such as leaves, bark or compost enrich the soil, and
  - it prevents compaction of the soil.
- A variety of mulches can be used:

compost, wood chips, nut shells, bark, pine needles and pebbles - even newspaper and black plastic sheeting, although they are not very aesthetic!

- Organic mulches: (e.g. compost, bark, straw) are cheaper and have the added advantage of enriching the soil with nutrients. However, they need to be replaced at regular intervals.
- Inorganic mulches: (e.g. pebbles, chipped stone) may be more expensive, but are cost effective in the long run because they last.
- The layer of mulch should be at least 8cm thick. Spread it evenly between plants, taking care to keep it clear of plant stems.

#### *Reduce your lawn area*

Lawns guzzle water. Decide how much lawn space you need for outdoor entertaining, children and pets, and consider reducing the area. Excess lawn can be replaced with hardy groundcovers or a water-wise flower bed.

#### *Tips for lawn care*

- Use Buffalo grass - it requires less water and less mowing.
- Do not cut the grass too short: longer leaves shade the roots and reduces water evaporation, and
- Aerate the soil for deeper water penetration

#### *Water correctly*

Most people over-water their gardens. Remember to apply the following rules:

- Water only when necessary (when the top 5-8 cm of soil is dry).
- Water well, less often. Frequent light sprinklings encourage shallow root

growth.

- Water in the early mornings and evenings when evaporation is at its lowest.
- Drip or underground irrigation saves water and reduces weed growth.
- A good watering must deliver at least 10mm of water, depending on your soil type. Put a glass under the sprinkler and see how long it takes to fill 10mm. Adjust your watering times accordingly.
- Water directly by drip or flood irrigation, rather than with a sprinkler.

#### *Garden maintenance*

- Remove weeds and unwanted plants - they take water away from the plants which you want to flourish.
- Prune sick or unsightly parts of shrubs and remove dead material.
- Consider planting fewer annual bedding plants. Plant more long-lived perennials - less work that way.

#### *Irrigation equipment and maintenance*

- Are any of your taps leaking? Check the washers on your taps. Is your hose pipe leaking and spraying water where it is not needed?
- Fixing the above will avoid unnecessary water loss and reduce your water consumption.

### **Planning a Water-wise Garden**

If you really want to optimise water use in your garden, you will need to consider aspects of planning and design. Although the planning phase does not cost anything, the implementation of the plan is likely to involve some effort and expenditure.

Creating a garden plan is an essential first step in water-wise gardening. Even if you do not have the money to implement it immediately, it will help you when planting up new areas, or when purchasing plants. This can save you a lot of money, time and effort in the long run.

- Draw up a plan of your existing garden.
- Pace the length and breadth of the garden and choose an appropriate scale.
- Measure up important distances and draw up the rest of the garden to scale.
- Show all large trees in their correct position on the plan.
- Draw in the beds.
- Indicate large shrubs on the plan, then groups of smaller plants and groundcovers.
- Make a list of the plants (if there are too many, select those which are most visible or important).

#### *Draw up a suitable plant list*

Choose plants which are adapted to local conditions. In the Western Cape we have a Mediterranean climate, with long dry, windy summers and cool wet winter. It makes sense to avoid tropical plants (which require high humidity and cannot cope with wind) and plants which need summer rainfall.

#### *Group plants according to their water needs*

Using your plant list, consult gardening books and staff at your local nursery to find out about each plant's water requirements. Make notes next to each plant on your list.

With the use of your garden plan, list the water requirements of each plant in its position. You may be surprised at how your planning looks. Some beds may have mainly high or low water-use plants. Other beds may have a mixture of high, medium and low water-use plants. It is these beds which require your most urgent attention. I means you are currently underwatering the high water-use plants.

Obviously the more low water-use beds you have, the less water you will be using. Replacing plants can be expensive process (if you intend to buy all the plants) so you may want to do this over a number of years. However the sooner one invests in beds of water-wise plants, the sooner it will reduce your water bill.

#### *Access your lawn areas*

Look at your plan and estimate whether the lawn area occupies more than 50% of your garden. If this is the case, then you are using too much water on lawns. You can cut down your water consumption dramatically by reducing the lawn area and replacing it with a water-wise flower bed.

#### *Check the following*

Are there any narrow strips of lawn which are used as pathways along the side of the house? Can they be replaced with a mulched pathway or water-wise ground covers? This may seem expensive initially but the long term savings in both maintenance and watering costs will be great.

Are there any steep slopes which are covered with grass? Replace them with a colourful mix of drought tolerant ground covers.

Look at your main lawn and think of your entertainment needs. Do you really use the whole lawn or could you reduce the area? Increase the size of your beds and plant with locally adapted species.

Are there areas of lawn which have a few shrubs in a 'sea' of lawn?

Consolidate the shrubs into a single bed and plant with low-water requiring plants.

Reducing your lawn saves both time and money. Less mowing and less watering means more time to relax!

### *Irrigation system*

Unfortunately most irrigation systems are installed for convenience with little thought for water conservation. Many automatic irrigation systems are poorly installed and waste a lot of water.

Ideally the irrigation system should have a number of different irrigation 'loops' or stations. One station should irrigate the lawn, another your high water-use beds and a third your low water-use beds. Each irrigation station should water for different lengths of time, and the intervals between watering should vary in duration. For example: the lawn may be watered once a week for half an hour, whereas the drought tolerant beds may only need to be watered once every 14 to 30 days, if at all. Irrigation needs will vary as the seasons change.

Consider the installation of drip irrigation in your beds. This is the most efficient method of watering, and the pipes can easily be concealed under a layer of mulch. It is possible to irrigate lawns with underground drip irrigation, but this may be expensive to install.

Moisture monitors and rain sensors can be fitted to your irrigation system to prevent over-watering.

### *Monitor your water consumption*

In many cases water bills give estimated readings rather than actual consumption. If you want an accurate assessment of the water you consume you should keep a record yourself.

- Remind yourself to check the water meter at least once a month.
- Keep a graph of your normal consumption.

### *Choosing water-wise plants*

There are many beautiful plants which are naturally drought-resistant and require little additional watering once established.

### *Place of origin*

Water-wise plants usually come from arid regions or areas which experience a prolonged dry season. They may be indigenous to South Africa, or come from other areas where the climate is similar to ours, like the Mediterranean basin, parts of the Chile, California and south-western Australia. Plants from these areas are well-suited to our conditions (e.g. rosemary, lavender, bouganvillea, cypress, myrtles and Australian Proteaceae) and mix well with indigenous water-wise plants.

Be careful not to take plants which are potentially invasive in South Africa (e.g. hakea, Australian acacias, lantana).

Find out where plants come from (their natural distribution), and in which habitat(s) they grow. This will give you a clue about how tough they are!

### *Features to look for*

Plants have developed a number of mechanisms to grow in hot, dry conditions. They survive by storing water, reducing water loss through the

leaves or by going underground during the dry season. When choosing plants for your garden, look for the following attributes which indicate water-efficient plants.

### Succulence

Water may be stored in different parts of the plant. For example aloes, crassulas and vygies have thick fleshy leaves. Euphorbia and cacti store water in their stems, whilst others have large fleshy roots (e.g. Cabbage trees).

### Small leaves

The leaves of plants contain minute openings (called stomata) through which air and moisture is transpired. Water-wise plants tend to have small, needle-like leaves - this minimises the surface area from which water is lost by evaporation. e.g. many fynbos species such as ericas, buchus and brunias.

### Foliage colour

Water-wise plants often have blue-green or grey leaves. The light colour reflects the sun's rays and keeps the leaf cooler, thus reducing the rate of transpiration. e.g. silver trees.

### Strong internal structure

Tender plants wilt easily in the heat. If this situation is prolonged, it causes irreversible damage to cells, eventually resulting in death of the plant. Water-wise plants have a strong internal skeleton which supports the leaf and prevents wilting. This enables them to survive for longer periods without water. e.g. restios, proteas, streptocarpus.

### Going underground

Many bulbous plants survive the dry

season by going dormant and 'ducking underground'. Annuals have adopted a similar strategy, by surviving in the form of seed. These plants generally need minimal care and add seasonal splashes of colour to the garden e.g. Namaqualand daisies, nemesias, some watsonias, March lilies, freesias, babianas, sparaxis.

## Planting tips

The autumn is the best time of year for planting in the Western Cape. The mild wet winter gives the plants a chance to establish before the stress of the hot dry summer.

For the best success with the trees, shrubs, climbers and herbaceous plants:

- Plant once the winter rain has started.
- Until the plants are planted keep them in a sheltered area and water them regularly.
- A weekly feed with a liquid fertiliser like Seagro would help maintain the plant quality.
- Prepare the area to be planted well with plenty of compost and some general fertiliser, e.g. 3:2:1 SR, dug in to at least one spade depth.
- For Trees prepare a good hole, 1x1x1m, it is worth all the effort in the long run. Mix plenty of compost, two large handfuls of bonemeal and a large handful of fertiliser such as 3:1:5 with the soil before refilling the hole.
- Fynbos species, such as Proteas, Ericas and Restios, should not be fed with bonemeal, Phosphates or manure but garden compost, composted pine bark or composted pine needles may be worked into the

- soil.
- After planting the beds should be mulched with wood chips, bark or pebbles to reduce water loss and weed growth.
- Though these plants are all indigenous they do need some additional water in summer to keep looking good, in particular during the first summer. A good water once or twice a week is preferable to a daily light sprinkling as it encourages the plant roots to grow down and reduces surface water loss.

## Proteas

*Aulax cancellata*  
*Aulax umbellata*  
*Diastella buekii*  
*Leucadendron 'Winter Red'*  
*Leucadendron 'Safari Sunset'*  
*Leucadendron comosum var haemophyllum*  
*Leucadendron cryptocephalum*  
*Leucadendron daphnoides*  
*Leucadendron discolor*  
*Leucadendron flexuosum*  
*Leucadendron gandogerii*  
*Leucadendron lanigerum*  
*Leucadendron laureolum*  
*Leucadendron loranthifolium*  
*Leucadendron modestum*  
*Leucadendron platyspermum*  
*Leucadendron procerum*  
*Leucadendron rubrum*  
*Leucadendron salignum*  
*Leucadendron spissifolium*  
*Leucadendron subsp phillipsii*  
*Leucadendron strobilinum*  
*Leucadendron tinctum*  
*Leucadendron uliginosum*  
*Leucadendron xanthoconus*  
*Leucospermum spp.*

*Protea 'Andrea'*  
*Protea 'Brenda'*  
*Protea 'Cardinal'*  
*Protea 'Pink ice'*  
*Protea 'Red Baron'*  
*Protea 'Sylvia'*  
*Protea acuminata*  
*Protea aristata*  
*Protea aurea*  
*Protea aurea ssp potbergensis*  
*Protea burchellii*  
*Protea compacta*  
*Protea cynaroides*  
*Protea eximia*  
*Protea grandiceps*  
*Protea laurifolia*  
*Protea longifolia*  
*Protea magnifica*  
*Protea mundii*  
*Protea nana*  
*Protea neriifolia*  
*Protea nitida*  
*Protea obtusifolia*  
*Protea pudens*  
*Protea punctata*  
*Protea repens*  
*Protea scolymocephala*  
*Protea susannae*  
*Serruria adscendens*  
*Serruria aemula*  
*Serruria foeniculacea*  
*Serruria rubricaulis*  
*Spatalla incurva*  
*Ericas*  
*Blaeria ericoides*  
*Erica baccans*  
*Erica bauera*  
*Erica coccinea*  
*Erica hirtiflora*  
*Erica mammosa*  
*Erica pinea*  
*Erica plukenetii*  
*Erica regia*  
*Erica tenuis*

*Erica versicolor*  
*Erica verticillata*  
*Restios*  
*Chondropetalum tectorum*  
*Rhodocoma gigantea*  
*Thamnochortus cinereus*  
*Thamnochortus insignis*  
*Thamnochortus lucens*  
*Thamnochortus pellucidus*  
Climbers  
*Clematis brachiata*  
*Jasminum multipartitum* (rambler)  
*Podranea ricasoliana*  
*Senecio macroglossus*  
*Senecio tamoides*  
*Thunbergia alata* 'Red, Orange, Yellow'  
Trees  
*Acacia* spp.  
*Albizia amara*  
*Bauhinia galpinii*  
*Bauhinia petersiana*  
*Brachylaena discolor*  
*Cassine aethiopica*  
*Cassine peragua*  
*Celtis africana*  
*Cussonia paniculata*  
*Cussonia spicata*  
*Dais cotinifolia*  
*Diospyros whyteana*  
*Dovyalis caffra*  
*Ekebergia capensis*  
*Erythrina caffra*  
*Euclea natalensis*  
*Eugenia natalitia* (*E. capensis* subsp. *natalitia*)  
*Ficus burtt-davyi* 'Cango'  
*Ficus cordata*  
*Grewia occidentalis*  
*Heteromorpha arborescens*  
*Kiggelaria africana*  
*Leucosidea sericea*  
*Loxostylis alata*  
*Maurocenia frangularia*  
*Maytenus oleoides*

*Olea europaea* subsp. *africana*  
*Phoenix reclinata*  
*Podocarpus latifolius*  
*Pterocelastrus tricuspidatus*  
*Rapanea melanophloeos*  
*Rhus glauca*  
*Schotia afra*  
*Schotia brachypetala*  
*Sideroxylon inerme*  
*Strelitzia nicolai*  
*Syzgium guineense*  
*Tarchonanthus trilobus*  
*Vepris lanceolata* (*V. undulata*)  
*Virgilia oroboides*  
*Widdringtonia cedarbergensis*  
*Widdringtonia schwarzii*  
Shrubs  
*Acmadenia heterophylla*  
*Acokanthera oppositifolia*  
*Agathosma* spp.  
*Anastrabe integerrima*  
*Anisodonteia* spp.  
*Barleria obtusa*  
*Buddleja* spp.  
*Carissa* 'Green Carpet'  
*Carissa macrocarpa*  
*Chrysanthemoides monilifera*  
*Cliffortia ericifolia*  
*Coleonema* spp.  
*Cyclopia maculata*  
*Diospyros austro-africana*  
*Dodonaea angustifolia*  
*Elytropappus rhinocerotis*  
*Eriocèphalus africanus*  
*Euryops virgineus*  
*Euryops pectinatus* subsp. *pectinatus*  
*Halleria elliptica*  
*Hibiscus diversifolius*  
*Hymenocallis parviflora*  
*Metalasia muricata*  
*Myrica cordifolia*  
*Nebelia laevis*  
*Nylandtia spinosa*  
*Pavonia praemorsa*

*Penaea mucronata*  
*Phylica* spp.  
*Plumbago auriculata*  
*Polygala myrtifolia*  
*Rhus crenata*  
*Rhus nebulosa*  
*Salvia africana-caerulea*  
*Salvia africana-lutea*  
*Salvia chamelaeagnea* (blue)  
*Strelitzia juncea*  
*Strelitzia reginae*  
*Strophanthus speciosus*  
*Tecomaria capensis*  
*Vernonia mespilifolia*  
 Herbaceous Perennial  
*Arctotis* spp.  
*Artemisia afra*  
*Asparagus densiflorus*  
*Asystasia gangetica*  
*Chironia baccifera*  
*Chrysanthemoides incana*  
*Cineraria saxifraga*  
*Cliffortia ferruginea*  
*Cliffortia odorata*  
*Cenia turbinata* (*Cotula tubinata*)  
*Dymondia margaretae*  
*Euryops annae*  
*Felicia* spp.  
*Ficinia truncata*  
*Gazania* spp.  
*Geranium incanum*  
*Helichrysum teretifolium*  
*Helichrysum argyrophyllum*  
*Helichrysum cymosum*  
*Helichrysum splendidum*  
*Hermannia saccifera*  
*Hypoestes aristata*  
*Leonotis leonurus*  
*Leysera gnaphaloides*  
*Limonium perigrinum*  
*Lobelia valida*  
*Lobostemon fruticosus*  
*Monopsis lutea*  
*Nemesia fruticans*

*Orthosiphon labiatus*  
*Osteospermum* spp.  
*Pelargonium betulinum*  
*Pelargonium abrotanifolium*  
*Pelargonium cordifolium* x *ternatum*  
*Pelargonium cucullatum*  
*Pelargonium denticulatum*  
*Pelargonium exstipulatum*  
*Pelargonium fruticosum*  
*Pelargonium glutinosum*  
*Pelargonium greytonense*  
*Pelargonium hybrid* 'Scarlet Ribbon'  
*Pelargonium inquinans*  
*Pelargonium ionidiflora*  
*Pelargonium panduriforme*  
*Pelargonium peltatum*  
*Pelargonium suburbanum* ssp  
*suburbanum*  
*Pelargonium zonale*  
*Plecostachys serpyllifolia*  
*Plectranthus fruticosus* 'James'  
*Plectranthus hadiensis* var *tomentosus*  
 'Mamba'  
*Plectranthus hadiensis* var *woodii*  
*Plectranthus madagascariensis* var  
*ramosior*  
*Plectranthus madagascariensis* var  
*madagascariensis*  
*Plectranthus neochilus* 'Siteki'  
*Plectranthus spicatus* 'Nelspruit'  
*Plectranthus strigosus* 'Albert'  
*Plectranthus verticillatus* 'Barberton'  
*Plectranthus verticillatus* x *P fruticosus*  
 'Mariane'  
*Pycnostachys reticulata*  
*Pycnostachys urticifolia*  
*Scabiosa incisa*  
*Selago corymbosa*  
*Senecio tanacetopsis*  
*Sutera cordata*  
*Sutherlandia frutescens*  
*Helipterum* cf *argyropsis*  
*Syncarpha paniculata*  
 Bulbous Plants

*Agapanthus praecox*  
*Aristea major*  
*Babiana* spp.  
*Brunsvigia orientalis*  
*Bulbinella latifolia*  
*Clivia miniata*  
*Freesia* spp.  
*Gladiolus alatus*  
*Haemanthus sanguineus*  
*Homeria comptonii*  
*Kniphofia garden hybrid*  
*Kniphofia praecox*  
*Kniphofia uvaria*  
*Lachenalia mixed*  
*Nerine sarniensis*  
*Ornithogalum dubium*  
*Ornithogalum thrysoides*  
*Veltheimia bracteata*  
*Watsonia* spp.  
Succulents  
*Aloe arborescens*  
*Aloe ciliaris*  
*Aloe dichotoma*  
*Aloe ferox*  
*Aloe plicatilis*  
*Aloe striata*  
*Aloe tenuior*  
*Bulbine latifolia*  
*Carpobrotus* spp.  
*Cotyledon* spp.  
*Crassula coccinea*  
*Crassula expansa*  
*Crassula multicava*  
*Crassula spathulata*  
*Drosanthemum* sp  
*Euphorbia caputmedusa*  
*Gasteria* spp.  
*Orbea variegata*  
*Portulacaria afra*  
*Sansevieria pearsonii*  
*Tylecodon* spp.



## ARID GARDENS

With the plants of the Succulent Karoo to choose from (representing the most diverse and colourful succulent kingdom in the world!), the possibilities are virtually limitless. This can be a very delightful garden - just think of the vygie family, sculptural aloes and euphorbias as tools for landscaping. As the name implies, the arid garden consists mainly of succulent plants as well as other drought-resistant groups such as karoo bulbs, shrubs, trees and annuals. This chapter is written mainly for Cape regions, but many of the species would grow in other dry parts of South Africa. Other drought-resistant groups include the spring annuals, crassulas, stapeliads, succulent composites and the spekboom family.

### Region of suitability and choosing a site

Obviously the most suitable site would be in the karoo or one of the arid regions mentioned below. However if your garden is not in an arid region, the first step in creating a succulent karoo garden is to choose a well drained site, preferably north-facing (in cooler and wetter regions).

Suitable regions include most of the

winter rainfall and summer rainfall karoo and semi-arid regions elsewhere. Rainfall in the south is mainly in winter, with long dry summers. An arid garden can also be established successfully in other dry parts of the Cape, even in dry regions of Transvaal and the Orange Free State and dry parts of the Cape Peninsula in semi-arid areas such as the steep west-facing slopes. Outside the succulent karoo region (winter rainfall karoo), especially in the upper karoo, Orange Free State and Transvaal highveld, care should be taken to protect some of the taller succulent shrubs by planting them close to rocks or a building to prevent frost damage.

### **Garden layout and rockery construction**

The arid garden layout is important and could have a framework of xerophilous (adapted for growing under arid conditions) trees and shrubs, with sensitive use of rocks to complement the garden. Accent plants such as *Aloe dichotoma* (the quiver tree), other larger *Aloe* species, *Euphorbia tetragona*, *E. triangularis*, *Tylecodon paniculatus* (butter-tree), *Portulacaria afra* (spekboom), *Crassula ovata* (kerky-bush) and many others can be used very effectively. The rock garden is very much part of an arid garden and the first step (in absence of a natural rockery) would be to create a hill where a rockery can be constructed. Natural rock gardens are more often confined to raised or mountainous areas, river valleys etc. In constructing a rock garden the key is to work in harmony with nature, and it must preferably blend into the rest of your garden. Choose a sunny open site, in moist regions preferably north-facing (southern hemisphere). A

small rockery can also be established against the northern side of a wall. Arrange the soil with a spade and rake to suit your design, creating the necessary contours, preferably with the greatest surface exposed to the sunny side (north). In the absence of sufficient top soil, the inner core of the rockery can be filled with any sandy soil, stone, old bricks or rock, but remember to cover the whole rockery with a layer of top soil 15 - 30 cm thick. The latter should be well drained, preferably sandy loam. Drainage can be improved by adding sand or grit. Firm the soil down by treading on it. The next phase is to construct a natural outcrop using your show rocks to form the framework. Copy the local rock formation and avoid 'dog graves'. Shale, sandstone, dolomite, doleritic or quartzite rocks are suitable. Ideally try to use the rock found naturally in your area and avoid using two or more geological formations in the same rockery. Starting from below, working your way to the top, terraces can be constructed, setting the rocks with the most attractive surface facing outwards. It is very important to have most of the strata run in the same direction, perhaps slightly tilted backwards. Preferably use the larger rocks as your framework, with the smaller rocks and stones creating as natural an effect as possible. Excavate with spade or hand and manoeuvre the rock to a stable position, exposing the larger portion (only a small part needs to be buried depending on the situation). Firm the soil down around the rocks and fill up air pockets. Once the construction is finished firm the soil down and tidy up. The rockery can now be planted. A well balanced rockery consist of various types

of drought-resistant shrubs, herbaceous perennials, bulbs, annuals and various types of succulents. Avoid aggressive plants that would overgrow the rockery, or prune back when necessary.

An inorganic ground layer of shale, quartz, granite chips, gravel or pebbles can also be very effective. Volcanic pumice is very popular abroad, but is not available here. This inorganic ground layer is also excellent for combating weed growth and soil erosion.

### Establishment, soil and plant management

Highly colourful annuals are a natural feature of our winter rainfall karoo regions and effective in a mass. These can be mixed or arranged in groups. For rapid results and suppression of weed growth, establish a whole area with annuals and fast growing pioneer trees (if required), shrubs and vygie species. Annual seeds should be sown during autumn and can be planted in situ or first planted out in beds and later transferred into a design or feature.

Fast growing trees and shrubs include the *Acacia karroo* (sweet thorn), *Lycium oxycarpum* (honey-thorn), *Buddleja saligna* (false olive), *Euphorbia mauritanica*, *Sutherlandia frutescens*, *Asclepias buchenaviana* (lammerlat), *Didelta spinosa*, *Sisyndite sparteae*. The permanent trees and shrubs such as the *Olea europaea subsp. afriana* (wild olive), *Schotia afra* (karoo boer-bean), *Nymania capensis*, *Rhigozum obovatum*, *Euclea undulata* (quarri) can also be planted at the same time, but are much slower while the others ensure rapid results.

Pioneer vygie species which would flower the first season of planting

includes *Drosanthemum striatum*, *D. hispidum*, *D. speciosum*, *D. bellum*, *D. micans* etc. These are easily established in seed trays and planted out.

*Lampranthus amoenus*, *L. roseus* and *L. multiradiatus* can be grown from cuttings planted in situ. *L. amoenus* is taller and should be placed in the background.

When planting annuals and biennials, use the taller species such as *Oncosiphon suffruticosum*, *Senecio elegans* and *S. arenarius* in the back with the smaller *Dimorphotheca pluvialis*, *D. sinuata* and *Dorotheanthus spp.* in the front. Initially the rockery would have to be weeded in some cases for best results. There are also a number of drought-resistant herbaceous species such as the drought-resistant pelargoniums (*P. echinatum*, *P. sericifolium*, *P. magenteum*) and *Osteospermum oppositifolium*. *Berkheya cuneata* and *Chrysanthemoides incana* with their grey leaves and yellow flowers are also very striking.

Many of the smaller crassulas are effective as ground covers and some have an attractive texture and reddish tan, e.g. *Crassula pubescens* subsp. *radicans*. *Crassula multicava* is effective in shady positions. *Othonna capensis* 'Ruby' has red grape-like leaves and yellow flowers and is a prostrate, fast grower. Other ground covers include the delospermas and succulent senecios. (*Delosperma litorale*, *D. ecklonis*, *D. cooperi*, *Senecio crassulaefolius*, *S. muiirii*). Many of the smaller haworthias are compact and are attractive in rock pockets.

Bulbs such as babianas, lachenalias, *Veltheimia capensis* and *Haemanthus spp.* are very floriferous and an important

feature of the South Africa winter rainfall arid regions. They can be arranged among the succulents, and are also highly effective among rocks.

### **Succulent plants in containers**

Most succulents thrive in containers and even miniature succulent gardens can be established this way. Container gardening is ideal for small gardens with limited space. There are often 'hot spots' in sunny corners where other plants cannot establish, which would be ideal for many succulent species. However, care should be taken with the choice, as some of the small succulent species require some shading. The larger sculptural succulent species are excellent for containers. These include the *A. dichotoma* (quiver tree), *A. ramosissima* (maiden's quiver tree), many other aloes, euphorbias, crassulas, *Dioscorea elephantipes* (elephant's foot) or *Cyphostemma* sp. (cobas tree). There are a great number of smaller species ideal for containers such as crassulas, species of *Cheiridopsis*, *Argyrodema*, *Ruschia* and many other small vygie species. When establishing a miniature garden, the same soil mixture as suggested above can be used. Also use the same type of rock throughout to create an effective natural miniature garden. Suitable plants include haworthias, gasterias, crassulas and senecios.

### **Succulents on dressed vertical stone walls**

Many species can be established in crevices or rocky pockets on stone walls. The aloes should be planted when fairly young as they are difficult to establish in

a small space when larger. Aloes are ideal for vertical walls since they have an adventitious root system which would not crack the wall.

A vertical wall provides excellent drainage and provides colour and texture in an area where growing space is usually wasted. On a north-facing aspect, the extra warmth would allow you to grow species otherwise very difficult to establish. At Kirstenbosch we have successfully established quiver trees and other difficult species this way.

Many creeping vygies are also very effective, e.g. *Ruschia lineolata*, *Lampranthus deltoides* and *L. comptonii*. These would hang down and root and prevent erosion. *Carpobrotus* is also rapid growing and can be planted at the top of walls, but tends to overgrow smaller plants. Other examples for establishing on vertical walls include *Euphorbia atrispina*, *E. pulvinata*, *Aloe ferox*, *A. vanbalenii*, *A. mitriformis*, *A. microstigma*, *A. glauca*, *A. melanacantha*, *A. reynoldsii* and *Bulbine latifolia*.

### **Maintenance, pests and diseases**

Apart from the annuals which need annual replanting during autumn, the other species need little maintenance. Some of the vygies should be replanted from new cuttings every 2-3 years. Remove old dead growth. Compost and a 2:3:2 dressing can be added annually to the beds just before the planting of annuals. Aloes also flourish with compost, and ample amounts of bonemeal can also be added for best results.

Argentinian ants do harm by establishing aphids in the crowns of

aloes but can easily be controlled with Malathion. Also, scale insects which can be troublesome on aloes and euphorbias are easily controlled with an oil-based insecticide such as Alboleum.

When rot sets into the larger succulent species, the infected part should be cut away, dusted with sulphur and dried before being replanted.

Watering is important and xerophytes should be watered only when required. Do not overwater as many species would rot. Signs of overwatering include unnatural grotesque growth and bursting leaves.

*Acacia karoo*, Soetdoring  
*Aloe dichotoma*, quiver tree  
*Aloe ferox*  
*Aloe glauca*  
*Aloe melanacantha*  
*Aloe microstigma*  
*Aloe mitriformis*  
*Aloe ramosissima*, nooienskokerboom  
*Aloe reynoldsii*  
*Aloe vanvalenii*  
*Argyroderma*  
*Asclepias buchenavianus*, Lammerlat  
*Berkheya cuneata*,  
*Buddleja saligna*, Basterolien  
*Bulbine latifolia* etc.  
*Cheiridopsis*  
*Chrysanthemoides incana*  
*Crassula multicava*  
*Crassula portulacea*, Kerkei  
*Crassula pubescens* ssp. *radicans*,  
*Cyphostemma* sp., kobasboom  
*Delosperma littorale*  
*Didelta spinosa*  
*Dimorphotheca pulvialis*  
*Dimorphotheca sinuata*  
*Dioscorea elephantipes*, elephants-foot  
*Dorotheanthus*

*Drosanthemum striatum*  
*Euphorbia triangularis*  
*Euclea undulata*, ghwarrie  
*Euphorbia pulvinata*  
*Euphorbia atrispina*  
*Euphorbia mauritanica*  
*Euphorbia tetragona*  
*Haemanthus*  
*Lachelnalia*  
*Lampranthus* spp., vygies  
*Lycium austrinum*, Wolftoon  
*Nymania capensis*  
*Olea europaeae* ssp. *africana*, wild olive  
*Osteospermums oppositifolium*  
*Pelargonium echinatum*  
*Pelargonium magenteum*  
*Pelargonium sericeum*  
*Pentzia suffruticosa*  
*Portulacaria afra*, Spekboom  
*Rhigozum obovatum*  
*Ruschia*  
*Salvia muiirii* etc.  
*Schotia affra*, karoo boerboon  
*Senecio crassulifolius*  
*Senecio elegans*  
*Sisyndite sparteae* etc.  
*Sutherlandia frutescens*  
*Tylecodon paniculatus*, Botterboom  
*Veltheimia capensis*



Catherine Handforth

## SHADE GARDENING

Shady areas should not be regarded as the dark, difficult corners of the garden, but rather as prime planting and living areas - especially in a country as hot and sunny as South Africa. Areas of full shade receive no direct sunshine, but light is available. Areas described as semi-shade either receive direct sunlight for a couple of hours a day or have dappled shade. Plants planted in areas with too little light will become spindly (elongated) and yellow and will not flower.

When starting a garden you should plan and develop it with cool, inviting shade areas. South Africa has a large variety of very attractive shade plants which include bulbs, succulents, ferns, herbaceous perennials, shrubs and trees. Plant a mixture of herbaceous perennials, bulbs, ferns, asparagus and shrubs for an exciting display of colour, form and texture.

Many of the shade plants are very effective in pots and hanging baskets. These containers can be used indoors, on patios and under trees where root growth makes planting difficult.

### Herbaceous plants

The limitations of shady areas are not determined by a lack of variety of suitable plants, but rather by the gardener's initiative and knowledge of the choice and cultivation of the plants. There is a large variety of indigenous herbaceous plants that can be grown successfully in the shady areas of a garden.

The *Plectranthus* species are the

largest group, varying in size and habit from ground covers to shrubs. It is a wonderful group to work with, because cuttings root easily, the plants are fast growing and make a beautiful display in autumn with masses of flowers in shades of pink, purple, blue and white. The leaves are of various sizes, colours, textures and shapes, and even when the plants are not in flower, they still make very attractive ground covers, fillers or focus plants. For more information, read the section dealing specifically with the cultivation and propagation of *plectranthus*.

Herbaceous plants need well drained soil and lots of water. Plants that grow in the shade under trees, receive little light and have to compete with the roots of the trees for water and nutrients; extra care is therefore needed. Prepare the soil well by adding compost and bone meal or superphosphate before planting. Thereafter 2:3:2 and 3:1:5 can be applied alternatively during the growing season.

### Ferns

The various shapes and textures of fern fronds provide contrast, interest and accent points in a shade area.

To achieve satisfactory results, consideration should be given to the environmental requirements of a fern. In general, full to dappled shade is needed by most fern species. However, just as important is the amount of light available. A very heavily shaded, dark area will give poor results.

Soils should be well drained and rich in humus to enable moisture retention without becoming waterlogged. Observation of a fern community growing on the forest floor will reveal a shallow root system taking advantage of the nutrients and moisture present in the decaying forest leaf litter. Protection should also be given against strong and constant winds which cause the fronds to dry rapidly and turn brown. Attempt to create an ideal microclimate with close planting. The components provide protection for one another and trap atmospheric moisture, thus raising local humidity.

Ferns should be kept well watered, and the soil should never be allowed to dry out completely. Fern fronds that wither owing to lack of water, can hardly revive and usually die off.

Regular feeding with a well balanced nutrient, either liquid or granular, will keep the fern actively growing and healthy.

*Cyathea capensis* (tree fern), *Blechnum* species, *Thelypteris dentata*, *Polystichum* species and *Todea barbara*: these are ferns with an upright rhizome, and they produce their fronds in a whorl arching out from the centre. *Blechnum tabulare* and species of *Cyathea* and *Todea* develop a distinct trunk.

*Adiantum aethiopicum* (maidenhair), *Adiantum hispidulum* (rosy maidenhair), *Asplenium inaequilaterale* and *Rumohra adiantiformis* (seven weeks fern): these are ferns with a horizontal or creeping rhizome growing along or under the surface of the soil. These species will in time grow to cover a larger surface area. *Stenochlaena tenuifolia* can be encouraged to climb a tree or support.

## Trees and shrubs

Although two thirds of South Africa are semidesert with few tree species, the eastern parts of the country are well wooded with almost a thousand tree species occurring in woodland, forest or savannas. Of these, many are adapted to grow in shade or filtered sunlight and most are well suited for horticultural use. These species vary in growth rate, shape, size, flower colour and leaf texture, thus providing a great variety to choose from. The species can be used as mass plantings, individually, in mixed beds, as accent plants or in containers, depending on the need. Most of the species on the list can be grown in gardens near the coast.

There are various shrubby semi-herbaceous species with large, attractive leaves. *Plectranthus fruticosus* and *P. ecklonii* are shrubs 2 - 3 m tall which are effective in mass plantings. They bear large, spreading leaves, those of *P. fruticosus* suffused with purple on the lower surface. *Sparmannia africana* is a shrub 3 - 4 m tall with large, spreading, hairy leaves and white flowers. It is used throughout the world today. *Indigofera natalensis* is another attractive shrub up to 1,5 m tall. *Mitrostigma axillare* is a small shrub up to 1 m tall. It has scented white flowers and yellow fruits. *Trichocladus crinitus* is an attractive shrub with large leaves which are glossy above and covered with chocolate brown hairs below.

The woody shrubs are long-lived and slow growing. *Diospyros whyteana* has small, dark green, glossy leaves. *Diospyros natalensis* has attractive horizontal branches and small leaves. The Pondo rose-apple, *Memeconom*

*bachmannii*, is a very attractive shrub with shiny rounded leaves, a must for all shady gardens.

There are various *Cussonia* species (cabbage trees) that are excellent as accent shrubs or small trees. They have erect stems with shiny, compound leaves clustered at the ends of the branches and vary from the small 1 meter tall *Cussonia arenicola* to the tall *C. sphaerocephala*. They have succulent roots and the plants are drought-resistant.

*Dracaena hookeriana* is an erect, single-stemmed plant with an attractive rosette of tapering leaves, giving a tropical effect. A few cycads are also suitable for shady areas. *Encephalartos villosus* is the smallest, a stemless species with large leaves up to 2 m tall. The shrubby caulescent species include *E. paucidentatus*, *E. transvenosus* and *E. ferox*, all with very ornamental leaves. The Pondo palm, *Jubaeopsis caffra*, also thrives in a shady garden and will attain a height of about 10 metres. *Strelitzia nicolai* (Natal strelitzia) is attractive with its large leaves. It forms a tall, multi-stemmed shrub up to 8 m.

All species mentioned in the previous two paragraphs thrive as container plants.

Most of the shade-loving shrubs do best in a fertile, compost-rich soil.

Coming from high-rainfall regions, they should be well watered. A balanced fertilizer such as 2:3:2 can be applied (handful per square meter) annually. The soil for the containers should be well drained and consist of one part sand, one part compost and one part loam. A cupful of bonemeal should be added to each wheelbarrow of soil.

## Shade-loving bulbs

A wide variety of shade-loving South African bulbs is very well suited to cultivation, both as garden and container subjects. Most of these are summer-flowering, and many have the added advantage of being evergreen, providing year-round interest in the garden.

In general, our shade-loving bulbs require a rich, well-drained soil containing plenty of organic matter such as well-rotted compost or leaf mould, liberal watering during summer, and as wind-free a situation as possible. During winter they undergo a dormant period when much less water is required. Regular liquid fertilizing during summer is very beneficial, and protection from frost is essential in susceptible areas.

The following is a list of some of the more desirable shade-loving species for cultivation in the garden or in containers, with the degree of shade tolerance for each species.

Many of the species below are available at the annual plant sale of the Botanical Society, held towards the end of March, and some are available from the Garden Shop at Kirstenbosch.

## Asparagus species

A small number of the 80 indigenous species of *Asparagus* are suitable for cultivation in shade or semi-shade. Most of these are summer-flowering and have small, sweet-smelling white flowers, later followed by non-poisonous red, yellow or orange berries with black seeds.

The 'asparagus fern' can be used in groups as a groundcover, as small individual shrubs or scramblers, as potplants or in hanging baskets. Some of the species have fronds which can be

used in flower arrangements.

In general *Asparagus* species occur in poor, well-drained soil and under dry conditions, but they benefit greatly from organic matter and regular watering. Spring and autumn feeding with liquid fertilizer or 2:3:2 will produce fast growing plants. The plants are relatively pest-free, but can be damaged by stinkbugs and pearslugs.

Most species are propagated by seed or by division of the fleshy rootstocks.

### Succulents in shade

Many succulent plants thrive in a shady habitat where they are protected from the hot rays of the sun. Of these, some have attractive colourful flowers and others ornamental leaves. The advantages of growing succulent plants are that they are easily propagated, can withstand periodic droughts and will grow without much feeding. Succulents are also well suited to windy coastal gardens.

South Africa has a great diversity of succulent plants mainly confined to the karoo. However, the shade-loving succulents originate from the well wooded subtropical eastern parts of the country.

Horticulturally, succulents that grow well in shade can be placed in four categories: mat-forming ground covers, erect herbaceous succulent plants, solitary accent plants and those suitable for containers.

- The mat-forming ground covers or trailing succulents are the most popular and a valuable asset as they combat soil erosion. They are useful on steep slopes, have very shallow roots and can grow where other

plants find it difficult to cope with root competition. Of these, the succulent *Plectranthus*, *Crassula* and *Senecio* species are popular. These are quick growing, rapidly forming a closed cover. *Plectranthus verticillatus* 'Barborton', *Crassula spathulata* and *C. expansa* subsp. *fragilis* are excellent examples.

- The larger, non-trailing, herbaceous succulents include species of *Gasteria*, and some *Aloe* and *Sansevieria* species. *Sansevieria* species have large erect leaves and are effective in group plantings.
- As the name implies, the accent species are planted as a focal point. *Gerrardanthus macrorhizus*, *Petopentia natalensis* and species of *Dioscorea* have huge succulent caudices resembling a rock and can also be used in large portable or non-portable containers. *Aloe bainesii* is a large succulent tree which is a rewarding plant for a large garden.
- There are many species that thrive in containers on shady stoeps or windowsills. *Ceropegia woodii* and *Senecio rowleyanus* are popular subjects that have trailing stems. The latter species is better known as 'string of pearls'. *Senecio articulatus* has jointed, mottled green stems. The smaller *Haworthia* and *Gasteria* species form dense groups and are easily grown. These shade-loving dwarf species can also be grouped together as a containerized miniature garden.

Succulent plants do best in a well drained soil to which ample compost has been added. A balanced fertilizer such as 2:3:2 can be applied annually (handful

per square meter). The ground covers can be planted in situ, the same way as a lawn is planted. Although these are drought-resistant plants, they should be watered regularly. The soil for containers should be well drained and consist of two parts sand, one part compost and one part loam.

Climbers

*Clematis brachiata*

Trees

*Diospyros whyteana*

*Encephalartos villosus*

*Halleria lucida*

*Heywoodia lucens*

*Mitriostigma axillare*

*Monanthes affinis*

*Ochna natalitia*

*Ocotea bullata*

*Psychotria capensis*

*Sparrmannia africana*

Shrubs

*Burchellia bubalina*

*Carissa bispinosa*

*Mackaya bella*

*Oxyanthus speciosus* subsp. *gerrardii*

*Stangeria eriopus* (sold with cycads)

### **Herbaceous Perennial**

*Alchemilla capensis*

*Cliffortia odorata*

*Cyperus* sp

*Diascia barberae*

*Diascia integerrima*

*Diascia mollis*

*Diascia rigescens*

*Helichrysum petiolare*

*Helichrysum petiolare* 'Limelight'

*Impatiens hochstetteri*

*Impatiens sylvicola*

### **Plectranthus spp.**

Bulbous Plants

*Clivia miniata*

*Crinum bulbisperrum*

*Crinum macowanii*

*Dietes butcheriana*

*Dietes iridioides*

*Drimiopsis maculata*

*Scadoxus multiflorus* subsp. *katharinae*

*Scadoxus puniceus*

*Veltheimia bracteata*

### **Succulents**

*Crassula expansa*

*Crassula spathulata*

*Gasteria* spp.

### **Orchids**

*Stenoglottis longifolia*

### **Ferns**

*Adiantum capillus-veneris*

*Adiantum hispidulum*

*Asplenium inaequilaterale*

*Asplenium lobatum*

*Blechnum punctulatum*

*Cleistanthus viridis*

*Macrothelypteris torresiana*

*Stenochlaena tenuifolia*

*Tectaria gemmifera*

*Thelypteris* spp

### **Container Plants**

*Begonia* spp

*Clivia miniata* var. *citrina*

*Peperomia* spp.

*Streptocarpus* spp.



Catherine Handforth

# PLANTING AND CARING FOR YOUR FYNBOS GARDEN

## Choice of site

- Fynbos plants require full sunlight.
- Soil should be well drained and preferably acidic.
- Although level sites are adequate, a rockery created on a sloping garden is ideal.
- Most fynbos plants tolerate strong coastal wind.

## Groundwork

- Ground should be dug over and grass/weeds removed.
- Sandstone rock looks good in a fynbos garden if placed sensitively.
- Dig in pure leaf composts (preferably pine needles) or decomposing wood chips. Make sure that this organic material is well rotted before planting, otherwise the plant roots may be burnt.

## Planting

The ideal time of year is in autumn or early winter after the first good rains. You may plant at other times if you take care to water regularly. Do not plant in the heat of summer.

Fynbos plants have delicate root systems which are susceptible to disturbance. It is therefore preferable to plant fynbos plants grown in smaller bags which are easier to handle.

Remove the plastic bag carefully from around the soil and roots, and place gently in the hole. Fill in around the plant and firm the soil lightly.

## Mulching

Place a mulch of decomposing pine needles or untreated wood chips and water well. Mulching protects the soil surface around the plant and keeps it cooler.

## Arrangement of plants

Spacing depends on the size and width the selected plants will attain and on the combinations of plants used. Fynbos plants tend to do better if planted closer together where they will form dense stands which completely cover the ground. This method of planting will help suppress weed growth and keep the soil surface cooler.

The fynbos landscape is characterised by dense stands of the same species in one area and a mixture of many different species in another. It is therefore important to mix some plant species and group others when planting (consult horticulturists).

- Dense stands of one species increases the chances of a plant disease (e.g. fungal attack) spreading and killing large numbers of plants.
- Plant species known to be susceptible to attack should be isolated from each other using other less susceptible species.
- Hardy colourful species, e.g. *Erica perspicua* or *E. lateralis*, can be planted in mass stands for a bold splash of colour.
- *Restios*, *proteas*, *ericas*, *buchus*,

phylicas, brunias certain daisy and vygie species are the basic groups to combine in your fynbos garden.

### Landscaping with Fynbos plants

It is important to choose a dominant or backbone plant group to hold the textural planting effect together. The ideal plants for this purpose are the Cape restios (dakriete). Of those available, the smaller dakriet (*Chondropetalum tectorum*) is an ideal choice.

### Watering

Fynbos plants are adapted to a Mediterranean climate (wet winters and hot, dry summers). Even though summers are dry, plants in many mountainous areas derive moisture from the cool south-east cloud cover. Fynbos plants in a garden situation should therefore be provided with regular supplementary water in summer. A good average is to water well every second or third day. Preferably water during the early morning so that the foliage is dry at night, thus reducing development of harmful fungi. Watering in the heat of midday may result in scorching.

### Feeding

Fynbos plants are adapted to nutrient-deficient, well leached soils. This does not mean that they do not require nutrients. Regular feeding with diluted organic liquid fertilizers will ensure good, balanced plant growth. Avoid fertilizers containing phosphates (P).

### Disease control

The most harmful and destructive diseases are fungal. Most losses occur during the summer months when a

virulent root fungus (*Phytophthora*) attacks some fynbos species. Most susceptible to these fungi are certain members of the Protea Family. Control through the use of fungicides in the garden is difficult and expensive. By the time the plant shows distress, it is normally too late to arrest the problem.

The best methods of control are the following:

- Purchase only good quality plants.
- Water plants early in the morning.
- Keep soil surface cool by mulching (warm and wet soil encourages fungal growth)
- Remove diseased plants immediately
- Do not overwater in summer
- Prune and remove diseased material

### Pruning

Pruning your shrubby fynbos species will improve their shape and if done at the right time, improve flowering. Probably the best time to prune is when the flowers have died so that you do not cut off new flower-producing shoots.

Ericas: removal of the growing tips will ensure a bushy plant.

Proteas: cut back just less than a third of the previous season's growth and remove old flowers.

### Life expectancy

It should be remembered that most fynbos species are relatively short-lived, i.e. between seven and fifteen years. A few of the larger proteas live longer, e.g. *Protea nitida* (waboom) and *Protea cynaroides* (king protea), but other species will become old and woody. It is then time to cut them out and start again. All Proteas

All Ericas  
 All Restios  
 Aquatic Plants  
*Aponogeton dystachyus*  
*Aponogeton junceus*  
*Lobelia capillifolia*  
*Nymphaea nouchali* var *caerulea* (N  
*capensis*)  
*Nymphoides indica*  
 Trees  
*Apodytes dimidiata*  
*Brabejum stellatifolium*  
*Brachylaena discolor*  
*Cassine aethiopica*  
*Cassine peragua*  
*Cunonia capensis*  
*Curtisia dentata*  
*Diospyros whyteana*  
*Halleria lucida*  
*Maurocena frangularia*  
*Maytenus oleoides*  
*Olea europaea* subsp *africana*  
*Podocarpus elongatus*  
*Podocarpus latifolius*  
*Psoralea pinnata*  
*Pterocelastrus tricuspidatus*  
*Rapanea melanophloeos*  
*Sideroxylon inerme*  
*Sparmannia africana*  
*Virgilia oroboides*  
*Widdringtonia cedarbergensis*  
*Widdringtonia schwarzii*  
 Shrubs  
*Acmadenia heterophylla*  
*Agathosma* spp.  
*Anisodonteia capensis*  
*Anisodonteia scabrosa*  
*Chrysanthemoides monilifera*  
*Cliffortia ericifolia*  
*Coleonema album*  
*Coleonema pulchellum*  
*Cyclopia maculata*  
*Dodonaea angustifolia*

*Eriocephalus africanus*  
*Euryops virgineus*  
*Halleria elliptica*  
*Metalasia muricata*  
*Myrica cordifolia*  
*Nebelia laevis*  
*Nylandtia spinosa*  
*Penaea mucronata*  
*Phyllica* spp.  
*Polygala myrtifolia*  
*Rhus crenata*  
*Salvia* spp.  
 Herbaceous Perennial  
*Arctotis* spp.  
*Artemisia afra*  
*Chironia baccifera*  
*Chironia laxa*  
*Chrysanthemoides incana*  
*Cineraria saxifraga*  
*Cliffortia ferruginea*  
*Cliffortia odorata*  
*Cenia turbinata* (*Cotula tubinata*)  
*Dymondia margaretae*  
*Euryops annae*  
*Felicia* spp.  
*Ficinia truncata*  
*Gazania* spp.  
*Geranium incanum*  
*Helichrysum teretifolium*  
*Helichrysum cymosum*  
*Helichrysum splendidum*  
*Hermannia saccifera*  
*Leysera gnaphaloides*  
*Limonium perigrinum*  
*Lobelia* spp.  
*Lobostemon fruticosus*  
*Monopsis lutea*  
*Monopsis unidentata*  
*Nemesia fruticans*  
*Orphium frutescens*  
*Pelargonium* spp.  
*Scabiosa incisa*  
*Selago corymbosa*

*Sutera cordata*  
*Sutherlandia frutescens*  
*Helipterum cf argyropsis*  
*Syncarpha paniculata*  
 Bulbous Plants  
*Aristea major*  
*Babiana* spp.  
*Cyrtanthus elatus*  
*Kniphofia uvaria*  
*Lachenalia* mixed  
*Nerine sarniensis*  
*Ornithogalum dubium*  
*Veltheimia bracteata*  
*Watsonia* spp.  
*Zantedeschia aethiopica*  
 Succulents  
*Aloe arborescens*  
*Aloe ciliaris*  
*Aloe ferox*  
*Aloe plicatilis*  
*Carpobrotus* spp.  
*Cotyledon orbiculata*  
*Crassula coccinea*  
*Delosperma* spp.  
*Drosanthemum* sp  
*Euphorbia caputmedusa*  
*Lampranthus* spp.  
*Orbea variegata*

## COASTAL GARDENS

In a coastal garden, sea, sand, salt laden winds and steep slopes are the basic problems which need to be coped with and overcome. This can be done using both structures referred to as hard landscaping and by using plants adapted to these conditions.

### Soil

Coastal gardens all have sandy soils, but the pH varies from acidic to alkaline, depending on where you live. Soil pH can be measured with a simple soil testing kit (available at most garden centres).

As a general rule:

- Alkaline soils are usually found in areas near the sea and inland dunes. The soil resembles beach sand and often contains tiny shell fragments.
- Acidic soil is usually found on mountain slopes, and is made from weathered sandstone rock.

### Plant Selection

This is the most critical factor in coastal gardening. Choose plants suited to the soil type and local conditions in your garden. If you have an alkaline soil, stick to those species which are marked as 'alkaline tolerant' on the attached plant list.

A coastal garden needs to be created in stages. The range of species being used is increased as conditions are ameliorated. Plan the garden as a whole and then work towards the plan.

## Basic concepts for creating a coastal garden.

### *Stabalise the site*

Lets start with the worst, a bare bulldozed sand field. The main thing is to stop everything blowing away. Sand is very abrasive and will very effectively ring bark a plant. So cover the ground with a good mulch layer of wood chips, paving, pebbles, buffalo-grass, annuals or ground covers, such as

*Arctotis stoechadifolia*, *Pelargonium capitatum*, *Chaetacnthus setiger*, *Cliffortia ferruginea*, *Gazania rigens* var. *uniflora*, *Geranium incanum* or *Helichrysum argyrophyllum*.

### *Soil preparation*

In coastal areas, the soil is often poor, sandy and very dry in summer. Low lying areas may also experience water-logging in winter. These problems can be overcome with the use of compost and mulch. It is important initially to prepare the soil well. It pays in the long run to do this properly, as it is disheartening to have to dig up an area that is already planted because nothing will grow. Dig in generous layer of well rotted compost supplemented with bone meal and a slow release fertilizer such as 3:1:5. The compost improves the soil structure so that there is better water penetration and retention, resulting in better plant growth.

### *Retaining steep slopes*

There are various ways - concrete retainers, rockeries, wooden paling, logs or retaining walls. Keep in mind that any form of retaining wall needs adequate drainage or the wall will collapse.

### *Wind shelter*

To break the force of the wind a vertical screen needs to be created. A solid wall causes turbulence and often does more damage than good. A perforated structure with about 60% solid components is ideal. A perforated screen will provide shelter for 7-8x the height of the screen and wind speed will be reduce for 20x the height

- Shade cloth is a good short term option.
- A wooden Lattice 6cm planks 4cm apart with or with out plants growing on it is very effective.
- Branches stuck into the ground provide a cheap relatively effective if not very attractive temporary screen, that will protect newly planted plants.
- A mix shrubbery of fast growing bushy species and slower growing trees in conjunction with other shelter will give the best long term barrier.

A densely planted 'thicket' of plants graded from small to tall will deflect most of the wind over the canopy and reduce wind speed. Plant hardy groundcovers in the front-line (on the windward side) to stabilise loose sand. Plant taller shrubs next in line, and finally hardy trees species. Once you have established a wind barrier, more tender species can be planted on the leeward side.

The type of plant to choose for barriers:

- are those that naturally grow in coastal areas and are adapted to the conditions
- as well as many plants from arid areas
- and some plants from windy areas, in particular the peninsula Mountains

- many of these screening plants have berries which bring birds into the garden, which in turn often bring extra plant species. (see section on attracting birds to the garden)

The plants should be planted close together to support each other and to create a moister microclimate.

These vertical screens should be used to divide the garden up into pockets making it both more interesting and providing better wind control.

It is worth planting annuals between shrubs in first years, both for colour and for additional shelter for the young plants. eg. the bokbaai vygie, *Dorotheanthus bellidiformis*, a spring annual typical of the west coast.

A canopy such as provided by a large tree, if you lucky enough to have one, or a pergola structure covered lathes, shade cloth or by a creeper such as *Clematis brachiata*, *Podranea ricasoliana*, *Jasminum angulare*, this helps reduce the openness of the coastal landscape. At the same time provides additional shelter from salt laden-wind and creates a shadier more humid environment in which more delicate plants can be grown. A canopy is particularly useful in reducing turbulence created by a solid structure.

Once shelter is provided a greater number of more fragile species can be planted. eg. *Euryops abrotanifolius*, *Plectranthus fruticosus*, *Agathosma ovata*, *Pelargonium betulinum*, *Ursinia abrotanifolia*, *Hemizygia obermeyeriae*, *Helichrysum splendidum*, *Acmadenia obtusata*, *Felicia aethiopica*.

Irrigation can be a problem in coastal garden as the sand often has an oiliness.

The best methods seem to be

- flooding - dams around trees
- drippers - 50cm apart 4hrs once a week
- fine mist - applied over a long period of time
- mulch to reduce evaporation

## Cape coastal gardening

The Cape Peninsula and the coastlines to the north and south of Cape Town provide very harsh conditions for gardening. This chapter provides solutions to some of the common problems facing the coastal gardener.

### Types of coastal gardens

Coastal areas can be divided into three basic zones, according to local conditions. These range from very harsh (zone 1), to moderate (zone 3).

#### ZONE 1:

This zone includes gardens which are close to the sea. Plants are exposed to very severe conditions, including strong onshore winds, sea salt and loose sand carried by the wind. e.g. Bloubergstrand, Khayelitsha, Kommetjie, Milnerton, Mitchells Plain, Muizenberg.

#### ZONE 2:

This zone includes areas further away from the sea, or areas where strong onshore winds are cushioned by mountains. Conditions are not as harsh as in zone 1. e.g. Fishhoek, Grassy Park, Lakeside, Retreat.

#### ZONE 3:

This zone is protected from salt-laden winds. It includes areas further inland, and those which lie in the shelter of a mountain. e.g. Diep River, Plumstead, Rondebosch, Tokai.

### **Local conditions (microclimates)**

The Cape Peninsula, by virtue of its landforms, has many different microclimates. Kirstenbosch, for example, lies at the foot of Table Mountain where it is well-protected from the influence of coastal winds. This allows the growth of many plant species which are difficult to grow only a few kilometres away.

Steep mountain slopes rising from the sea tend to soften the effects of strong onshore winds. Conditions at Kalkbay, Simonstown and Camps Bay are therefore less severe than at Milnerton and Muizenberg.

### **Summary**

1. Determine which zone you live in, using the map.
2. Determine your soil type.
3. Select plants accordingly. Low growing plants survive best in very windy areas.
4. It is preferable to plant in autumn or winter, so that plants have a chance to establish before it gets hot.
5. Plant the plants close together for mutual support.
6. Grade the planting from small to tall to deflect the wind.
7. Use plenty of mulch to retain soil moisture.

### **Species suitable for coastal conditions**

species that will grow under alkaline conditions are marked with \*

## Proteas

*Aulax cancellata*  
*Aulax umbellata*  
*Leucadendron* 'Winter Red'  
*Leucadendron* 'Safari Sunset'  
*Leucospermum cordifolium* 'Fire dance'  
*Leucospermum* 'Scarlet ribbon'  
*Leucospermum* 'Tango'  
*Leucospermum conocarpodendron*  
*Leucospermum cordifolium* \*  
*Leucospermum cordifolium* 'Caroline'  
*Leucospermum cordifolium* 'Flamespike'  
*Leucospermum cordifolium* 'Yellow bird'  
*Leucospermum cordifolium* 'Vlam'  
*Protea compacta*  
*Protea cynaroides*  
*Protea neriifolia*  
*Protea obtusifolia* \*  
*Protea repens*  
*Protea scolymocephala* \*  
*Serruria aemula*  
*Serruria foeniculacea*

## Ericas

*Blaeria ericoides*  
*Erica baccans*  
*Erica bauera*  
*Erica mammosa*  
*Erica patersonia*  
*Erica tenuis*  
*Erica versicolor*  
*Erica verticillata*

## Restios

*Chondropetalum tectorum* \*  
*Thamnochortus insignis*  
*Thamnochortus lucens*

## Climbers

*Clematis brachiata*  
*Jasminum angulare*  
*Jasminum multipartitum* (rambler)  
*Podranea ricasoliana*  
*Senecio macroglossus* \*  
*Senecio tamoides* \*

## Trees

*Apodytes dimidiata* \*  
*Bauhinia galpinii*  
*Brachylaena discolor* \*  
*Buddleja saligna* \*  
*Cassine aethiopica*  
*Cassine peragua*  
*Celtis africana*  
*Dovyalis caffra*  
*Euclea natalensis*  
*Ficus burtt-davyi* 'Cango'  
*Ficus craterostoma*  
*Ficus natalensis*  
*Ficus sansibarica*  
*Ficus thonningii*  
*Ficus verruculosa*  
*Grewia occidentalis* \*  
*Maurocena frangularia*  
*Maytenus oleoides*  
*Olea europaea subsp. africana* \*  
*Phoenix reclinata*  
*Pterocelastrus tricuspidatus* \*  
*Rhus glauca* \*  
*Sideroxylon inerme* \*  
*Strelitzia nicolai*  
*Syzgium guineense*  
*Syzgium cordatum* \*  
Shrubs  
*Acmadenia heterophylla*  
*Agathosma spp*  
*Anastrabe integerrima*  
*Anisodonteia capensis* \*  
*Anisodonteia scabrosa* \*  
*Barleria obtusa* \*  
*Buddleja auriculata* \*  
*Buddleja loricata*  
*Buddleja salviifolia* \*  
*Carissa* 'Green Carpet'  
*Carissa macrocarpa*  
*Chrysanthemoides monilifera* \*  
*Cliffortia ericifolia*  
*Coleonema album*  
*Coleonema pulchellum*

*Dodonaea angustifolia*  
*Elytropappus rhinocerotis* \*  
*Eriocephalus africanus* \*  
*Euryops virgineus*  
*Euryops pectinatus* subsp. *pectinatus*  
*Freylinia lanceolata*  
*Halleria elliptica*  
*Hibiscus diversifolius*  
*Hymenocallis parviflora*  
*Metalasia muricata* \*  
*Myrica cordifolia*  
*Nylandtia spinosa*  
*Phyllis buxifolia* \*  
*Plumbago auriculata* \*  
*Polygala myrtifolia* \*  
*Rhus crenata* \*  
*Rhus nebulosa*  
*Salvia africana-caerulea*  
*Salvia africana-lutea* \*  
*Salvia chamelaeagnea* (blue)  
*Strelitzia juncea*  
*Strelitzia reginae* 'Mandela's Gold'  
*Strophanthus speciosus*  
*Tecomaria capensis* \*  
*Vernonia mespilifolia*  
**Herbaceous Perennial**  
*Arctotis hybrid* \*  
*Arctotis acaulis* \*  
*Arctotis steochadifolia* \*  
*Artemisia afra*  
*Asparagus densiflorus* 'Cwebe'  
*Asparagus densiflorus* 'Mazeppa'  
*Asparagus densiflorus* 'Flagstaff'  
*Asparagus densiflorus* 'Meyersii'  
*Asystasia gangetica*  
*Barleria repens*  
*Chironia baccifera*  
*Chrysanthemoides incana* \*  
*Cineraria saxifraga* \*  
*Cliffortia ferruginea* \*  
*Cliffortia odorata* \*  
*Cenia turbinata* (*Cotula turbinata*) \*  
*Dymondia margaretae*

*Felicia aethiopica* \*  
*Felicia bergerana*  
*Felicia echinata*  
*Felicia filifolia*  
*Ficinia truncata* \*  
*Gazania 'Pink'*  
*Gazania krebsiana*  
*Gazania rigens* var. *rigens* \*  
*Gazania rigens* var. *uniflora* \*  
*Geranium incanum* \*  
*Helichrysum teretifolium*  
*Helichrysum argyrophyllum*  
*Helichrysum cymosum* \*  
*Helichrysum splendidum*  
*Hermannia saccifera*  
*Hypoestes aristata*  
*Leonotis leonurus* \*  
*Leysera gnaphaloides*  
*Limonium perigrinum* \*  
*Lobelia valida*  
*Lobostemon fruticosus*  
*Mentha longifolia* subsp. *capensis*  
*Monopsis lutea* \*  
*Monopsis unidentata*  
*Nemesia fruticans*  
*Osteospermum caulescens*  
*Osteospermum eckloni* \*  
*Osteospermum fruticosum*  
*Osteospermum jucundum*  
*Pelargonium betulinum* \*  
*Pelargonium cucullatum*  
*Pelargonium glutinosum*  
*Pelargonium inquinans* \*  
*Pelargonium panduriforme*  
*Pelargonium peltatum* \*  
*Pelargonium zonale* \*  
*Plecostachys serpyllifolia*  
*Plectranthus ciliatus* 'Drege'  
*Plectranthus ciliatus* 'Richard'  
*Plectranthus fruticosus* 'James'  
*Plectranthus madagascariensis* var. *madagascariensis*  
*Plectranthus neochilus* 'Siteki'

*Plectranthus strigosus* 'Albert'

*Pycnostachys reticulata*

*Pycnostachys urticifolia*

*Scabiosa incisa* \*

*Selago corymbosa*

*Senecio tanacetopsis*

*Sutera cordata* \*

*Sutherlandia frutescens* \*

### **Bulbous Plants**

*Agapanthus praecox* \*

*Aristea major* 'Blue'

*Aristea major* 'Pink'

*Babiana* mixed

*Brunsvigia orientalis* \*

*Bulbinella latifolia* \*

*Dietes bicolor*

*Freesia corymbosa*

*Ixia* mixed

*Kniphofia* garden hybrid

*Kniphofia praecox*

*Kniphofia uvaria*

*Lachenalia* mixed

*Scilla natalensis*

*Veltheimia bracteata* \*

*Watsonia borbonica* ssp. *borbonica*

*Watsonia borbonica* ssp. *ardernei*

*Zantedeschia aethiopica* \*

### **Succulents**

*Aloe arborescens* \*

*Aloe ciliaris*

*Aloe ferox*

*Bulbine latifolia*

*Carpobrotus* spp. \*

*Cotyledon orbiculata* \*

*Crassula* spp.

*Drosanthemum* spp.

*Euphorbia caputmedusa*

*Lampranthus* spp. \*

*Orbea variegata*

*Portulacaria afra*

*Sansevieria pearsonii*

## HOW TO MAKE A COMPOST HEAP

### **Assessing the soil: Why composting is essential**

No garden has perfect soil. A soil that is classified as good needs to be well aerated and allow for proper drainage. This will depend on the quantity and type of soil particles present. The particles being clay, sand, loam and a very important ingredient called humus. Without it a soil has no structure and the little structure that is left will deteriorate. Compost is important, to restore soil structure by supplying humus, retain soil moisture, aerate soils and provide some nutrients.

### **Location**

A position under a well canopied tree or adjacent to a tall hedge is ideal. This is not essential and any shady place will be good enough. Direct sun would dry out the outer 15cm and prevent the material from breaking down. Care should be taken to ensure that the heap is not build in low lying ground that may be underwater during winter. A corner or spot in the garden out of sight would be good enough.

### **Materials**

Almost any organic matter can be placed on the heap. Vegetable scraps, leaves, lawn cuttings, soft hedge trimmings, clean fruit scraps. Stalks of sweetcorn, cabbage, broccoli, Brussels's sprouts and cauliflower can also be used.. Sawdust can also be used but in small

quantities, as well as egg shells and dead flowers. Any rotting vegetable or animal manure will supply humus but no dog or cat faeces must be used in your compost heap. Farm manure is still considered to be the best. In the case where poultry or animal manure is not available, gardeners have the choice of several manufactured activators. They are available in powder form from local nurseries. The decay of the compost heap is due to the action of bacteria, worms, fungi and insects.

### Construction

The size of heap should be at least 1.2-2 m wide by 1.2-2 m high and as long as required. The heap should be built in alternating layers of : - 10-20 cm. stable manure

- 20 cm twiggy prunings
- 10 cm soft vegetation, kitchen waste, sawdust, lawn clippings etc.

topped with a sprinkling of lime and activator if being used and a then a thin layer of soil

You can construct a framework of poles and wetting wire (chicken wire/shade cloth) for the sides. Water each layer well as the heap grows. Cover the whole heap with a thin layer of soil. Insert a metal rod in the middle of the heap so that the temperature of the heap can be monitored.

The heap should be turned over weekly or as soon as the temperature starts to drop.

The heap should be kept moist and well aerated to allow optimal microbial activity. The ideal moisture level should be that of a squeezed-out sponge. During extended periods of heavy rain the heap may be covered with black plastic to stop it becoming too cold and wet. A compost heap should preferably rest directly on the soil to allow for free movement of micro-organisms and earthworms which helps in the decay process. The compost should take 6 - 10 weeks to be ready. Compost bins are also available from nurseries if space is a problem.

## FYNBOS POTTING MIX

There are a few pointers to keep in mind when creating a fynbos potting medium.

Cost - the mixture should be affordable.

Environmentally friendly - none of the components should be gathered at the detriment of the environment, e.g. digging out soil, stripping peat beds, etc.

The mix must be well aerated so that the roots get a good air supply.

The plants also need water so the mixture must hold some water.

There must be good soil fungi, mycorrhiza, that help the plants absorb water and nutrients, but there must not be bad soil fungi that will kill the plant, e.g. phytophthora. The correct balance is not easy to achieve, it is like playing Russian Roulette - most of the time every thing is fine but every now and then everything dies.

The mixture must be low in Phosphorus (P) which is toxic to most fynbos species.

The mixture should be acidic, with a low pH of between 5 and 6.5.

Traditionally fynbos plants are not fed with synthetic fertilizer but no-one can say why or if one feeds how much. Recent soil trial at Kirstenbosch indicate that fynbos plants do well in fertilized mixtures and this corresponds with the experience of Australian and New Zealand growers.

### Two fynbos potting mixes

A soil-based potting medium:

8 sand : 4 loam : 8 bark : 1 fern fibre with 500 g Ammonium Sulphate per cubic metre.

A soil-less potting medium:

2 parts fine composted milled bark and 1 part fern fibre or coarse peat with 1.5 kg controlled fertilizer low in Phosphate (e.g. Horticote 7:1:2(27) 365 day formulation) per cubic metre.

(A heaped wheelbarrow is approximately 1/15th of a cubic metre.)

Kirstenbosch Fynbos Mixture is available from the Garden Centre, at Kirstenbosch National Botanical Garden, in ready mixed in bags for the home user.

## SMOKE TREATMENT FOR SEED

### Many species respond to smoke

Very promising results have been obtained, showing significantly improved seed germination in many species following treatment with smoke. To date, approximately 190 species from the Proteaceae, Ericaceae, Restionaceae, Bruniaceae, Asteraceae, Fabaceae, Mesembryanthemaceae, Poaceae

(Grasses), Rutaceae (Buchus), Geraniaceae (Pelargoniums) and other families have been screened for a response to smoke.

### Smoking procedure

In the plant nursery, the procedure for smoking seed is a relatively simple one and is easy to carry out.

Seed is sown in conventional plastic trays and is covered by a thin layer of soil or finely milled bark.

The trays are placed in a polythene tent and smoke is pumped into the tent by means of a plastic pipe from a large metal drum. The smoke is generated in the drum by burning a mixture of dry and green fynbos leaf and stem material. The trays are left in the smoke for 1-2 hours.

At the end of this period the trays are removed and the seeds carefully watered to wash the smoke deposit into the soil.

The seed trays are then placed under cover in a shade house until the seeds have germinated. Seeds of many fynbos species require fluctuating day/night temperatures for germination (e.g., 20 °C day/10 °C night). This is a germination cue related to the post-fire environment in the natural habitat, which has a Mediterranean-type climate, with summer drought and winter rain. Removal of the vegetation cover by fire in the late summer or early autumn results in more extreme day and night soil temperatures at a time when the first rains are likely to begin. The best time to sow and smoke-treat fynbos seeds is thus in the late summer and early autumn (March-May in the Southern Hemisphere).

### **Smoke in a packet**

In addition to plant-derived smoke itself, aqueous extracts of smoke also break seed dormancy and give the same dramatic improvement in seed germination in many species which have previously been difficult or impossible to germinate in the nursery. In order to make smoke technology available to a wider spectrum of botanists, horticulturists and gardening enthusiasts, Kirstenbosch

researchers developed a seed primer incorporating aqueous smoke extracts. Absorbent paper discs are impregnated with aqueous smoke solution. The discs are then dried and packed into polythene packets ('Smoke in a packet'). The primer can be used by gardeners to break dormancy in seed samples without having to light a fire. In order to activate the primer, water is added to the paper and seeds are soaked in the resultant solution for 24 hours. During 1995, 2000 packets were sold and reports of improved germination in a wide range of South African and Australian species have been received.

Typical of the response from users of the primer was a report by Pienaar (1995) who had previously achieved considerable success with the germination of seed of most vygie species (*Mesembryanthemaceae*) from the drier regions of South Africa. He stated that the primer should be used by all horticulturists interested in growing vygies from seed collected from such locations. He concluded 'That this discovery has definite survival value for those rare, localized and endangered fynbos taxa cannot be doubted. It is a major breakthrough in the ex situ cultivation of such species and will ensure their continued survival.'

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# INDEX

Code	Group	
AN	Annuals	<i>Adiantum aethiopicum</i> F
AQ	Aquatics	<i>Adiantum capillus-veneris</i> F
B	Bulbs	<i>Adiantum hispidulum</i> F
BU	Buchus	<i>Adiantum incisum</i> F
C	Climbers	<i>Adromischus cristatus</i> SC
CY	Cycads	<i>Adromischus filicaulis</i> subsp. <i>marlothii</i> SC
E	Ericas	<i>Adromischus montium-kinghardtii</i> SC
F	Ferns	<i>Adromischus roaneanus</i> SC
HP	Herbaceous Perennials	<i>Aeollanthus buchnerianus</i> HP
O	Orchids	<i>Aeollanthus parvifolius</i> HP
P	Proteas	<i>Aeollanthus suaveolens</i> AN
R	Restios	<i>Aerva leucura</i> HP
S	Shrubs	<i>Agapanthus 'Tinkerbelle'</i> B
SC	Succulents	<i>Agapanthus campanulatus</i> subsp. B
T Trees		<i>Agapanthus campanulatus</i> s
		ubsp. <i>campanulatus</i> 'Hardingsdale' B
		<i>Agapanthus campanulatus</i> subsp. <i>patens</i> B
		<i>Agapanthus caulescens</i> subsp. <i>angustifolius</i> B
		<i>Agapanthus caulescens</i> subsp. <i>angustifolius</i> 'Politique' B
		<i>Agapanthus caulescens</i> subsp. <i>caulescens</i> B
		<i>Agapanthus coddii</i> B
		<i>Agapanthus comptonii</i> subsp. <i>comptonii</i> B
		<i>Agapanthus comptonii</i> subsp. <i>longitubus</i> B
		<i>Agapanthus dyeri</i> B
		<i>Agapanthus inapertus</i> subsp. <i>hollandii</i> B
		<i>Agapanthus inapertus</i> subsp. <i>hollandii</i> 'Lydenburg' B
		<i>Agapanthus inapertus</i> subsp. <i>hollandii</i> 'Sky' B
		<i>Agapanthus inapertus</i> subsp. <i>inapertus</i> B
		<i>Agapanthus inapertus</i> subsp. <i>intermedius</i> B
		<i>Agapanthus inapertus</i> subsp. <i>intermedius</i> 'Wolkberg' B
		<i>Agapanthus inapertus</i> subsp. <i>pendulus</i> B
		<i>Agapanthus inapertus</i> s
		ubsp. <i>pendulus</i> 'Graskop' B
		<i>Agapanthus nutans</i> B
		<i>Agapanthus praecox</i> 'Dwarf White' B
		<i>Agapanthus praecox</i> 'Elegans' B
		<i>Agapanthus praecox</i> 'Medium White' B
		<i>Agapanthus praecox</i> 'Miniature White' B
		<i>Agapanthus praecox</i> 'White' B
		<i>Agapanthus praecox</i> subsp. <i>minimus</i> B
		<i>Agapanthus praecox</i> subsp. <i>minimus</i> B
		<i>Agapanthus praecox</i> subsp. <i>minimus</i> 'Dwarf Blue' B
		<i>Agapanthus praecox</i> subsp. <i>minimus</i> 'Forma' B
		<i>Agapanthus praecox</i> subsp. <i>minimus</i> 'Storms River' B
		<i>Agapanthus praecox</i> subsp. <i>orientalis</i> B
		<i>Agapanthus praecox</i> subsp. <i>orientalis</i> 'Mt Thomas' B
		<i>Agapanthus praecox</i> subsp. <i>orientalis</i> B
		<i>Agapanthus praecox</i> subsp. <i>praecox</i> B
<i>Acacia ataxacantha</i>	T	
<i>Acacia borleae</i>	T	
<i>Acacia burkei</i>	T	
<i>Acacia caffra</i>	T	
<i>Acacia erioloba</i>	T	
<i>Acacia galpinii</i>	T	
<i>Acacia haematoxylon</i>	T	
<i>Acacia hebeclada</i>	T	
<i>Acacia hebeclada</i> subsp. <i>tristis</i>	T	
<i>Acacia karroo</i>	T	
<i>Acacia luederitzii</i> var. <i>luederitzii</i>	T	
<i>Acacia luederitzii</i> var. <i>retinens</i>	T	
<i>Acacia mellifera</i>	T	
<i>Acacia mellifera</i> subsp. <i>detinens</i>	T	
<i>Acacia nigrescens</i>	T	
<i>Acacia nilotica</i>	T	
<i>Acacia rehmanniana</i>	T	
<i>Acacia robusta</i>	T	
<i>Acacia schweinfurthii</i> var. <i>schweinfurthii</i>	T	
<i>Acacia sieberana</i> var. <i>woodii</i>	T	
<i>Acacia tortilis</i>	T	
<i>Acacia tortilis</i> subsp. <i>heteracantha</i>	T	
<i>Acmadenia alternifolia</i>	BU	
<i>Acmadenia heterophylla</i>	BU	
<i>Acmadenia mundiana</i>	BU	
<i>Acmadenia obtusata</i>	BU	
<i>Acokanthera oblongifolia</i>	S	
<i>Acokanthera oppositifolia</i>	S	
<i>Acokanthera rotundata</i>	S	
<i>Acridocarpus natalitius</i>	S	
<i>Adenandra fragrans</i>	BU	
<i>Adenandra gummiifera</i>	BU	
<i>Adenandra uniflora</i>	BU	
<i>Adenia hastata</i>	SC	

Agapanthus praecox subsp. praecox 'Azure'	B	Aloe erinacea	SC
Agapanthus praecox subsp. praecox B		Aloe esculenta	SC
Agathosma apiculata	BU	Aloe ferox	SC
Agathosma betulina	BU	Aloe fosteri	SC
Agathosma cerefolium	BU	Aloe gariensis	SC
Agathosma ciliaris	BU	Aloe hereroensis	SC
Agathosma collina	BU	Aloe khamiensis	SC
Agathosma crenulata	BU	Aloe krapohlana	SC
Agathosma dielsiana	BU	Aloe littoralis	SC
Agathosma glabrata	BU	Aloe lutescens	SC
Agathosma gonaquensis	BU	Aloe maculata (A. saponaria)	SC
Agathosma imbricata	BU	Aloe marlothii	SC
Agathosma martiana	BU	Aloe melanacantha	SC
Agathosma mucronulata	BU	Aloe microstigma	SC
Agathosma ovata	BU	Aloe mitriformis	SC
Agathosma ovata 'Bloukrans'	BU	Aloe monotropa	SC
Agathosma ovata 'Glentana'	BU	Aloe parvibracteata	SC
Agathosma ovata 'Igoda'	BU	Aloe petricola	SC
Agathosma ovata 'Kluitjieskraal'	BU	Aloe pictifolia	SC
Agathosma ovata 'Outeniqua'	BU	Aloe pillansii	SC
Agathosma ovata 'Witteklip'	BU	Aloe plicatilis	SC
Agathosma scaberula	BU	Aloe pluridens	SC
Agathosma serpyllacea	BU	Aloe ramosissima	SC
Agathosma serpyllacea 'San Sebastian'	BU	Aloe reitzii	SC
Alberta magna	T	Aloe reynoldsii	SC
Albizia adianthifolia	T	Aloe rupestris	SC
Albizia amara	T	Aloe speciosa	SC
Albuca canadensis	B	Aloe spectabilis	SC
Albuca nelsonii	B	Aloe striata	SC
Alchemilla capensis	HP	Aloe striata subsp. karasbergensis	SC
Allophylus dregeanus	T	Aloe striata x maculata	SC
Allophylus natalensis	T	Aloe succotrina	SC
Aloe aculeata	SC	Aloe suprafoliata	SC
Aloe affinis	SC	Aloe tenuior	SC
Aloe africana	SC	Aloe thompsoniae	SC
Aloe arborescens	SC	Aloe thraskii	SC
Aloe arenicola	SC	Aloe vandermerwei	SC
Aloe aristata	SC	Aloe variegata	SC
Aloe barberiae	SC	Aloe verecunda	SC
Aloe branddraaiensis	SC	Aloe viridiflora	SC
Aloe brevifolia var. brevifolia	SC	Aloinopsis acuta	SC
Aloe broomii	SC	Aloinopsis luckhoffii	SC
Aloe buhrii	SC	Aloinopsis malherbei	SC
Aloe candelabrum	SC	Aloinopsis rosulata	SC
Aloe chabaudii	SC	Aloinopsis rubrolineata	SC
Aloe ciliaris	SC	Aloinopsis schooneesii	SC
Aloe claviflora	SC	Aloinopsis setifera	SC
Aloe commixta	SC	Aloinopsis villetii	SC
Aloe comosa	SC	Amaryllis belladonna	B
Aloe comptonii	SC	Ammocharis coranica	B
Aloe cooperi	SC	Anacampseros albidiflora	SC
Aloe cryptopoda	SC	Anacampseros arachnoides	SC
Aloe dichotoma	SC	Anacampseros filamentosa	SC
Aloe dyeri	SC	Anacampseros retusa	SC

<i>Anacampseros rufescens</i>	SC	<i>Asparagus recurvispinus</i>	HP
<i>Anacampseros telephiastrum</i>	SC	<i>Asparagus retrofractus</i>	HP
<i>Anastrabe integririma</i>	S	<i>Asparagus scandens</i>	HP
<i>Anchusa capensis</i>	HP	<i>Asparagus virgatus</i>	HP
<i>Anisodontea anomala</i>	S	<i>Asplenium boltonii</i>	F
<i>Anisodontea capensis</i>	S	<i>Asplenium gemmiferum</i>	F
<i>Anisodontea elegans</i>	S	<i>Asplenium inaequilaterale</i>	F
<i>Anisodontea julii</i>	S	<i>Asplenium lobatum</i>	F
<i>Anisodontea scabrosa</i>	S	<i>Asplenium monanthus</i>	F
<i>Anomatheca laxa</i>	B	<i>Asplenium sandersonii</i>	F
<i>Antegibbaeum fissoides</i>	SC	<i>Asplenium splendens</i>	F
<i>Aphloia theiformis</i>	T	<i>Asplenium x flexuosum</i>	F
<i>Apodytes dimidiata</i> subsp. <i>dimidiata</i>	T	<i>Astroloba bullulata</i>	SC
<i>Apodytes</i> sp. <i>nova</i>	T	<i>Astroloba rugosa</i>	SC
<i>Aponogeton angustifolius</i>	AQ	<i>Asystasia gangetica</i>	HP
<i>Aponogeton distachyos</i>	AQ	<i>Atalaya alata</i>	T
<i>Arctotis acaulis</i>	HP	<i>Atalaya capensis</i>	T
<i>Arctotis aenea</i>	HP	<i>Atalaya natalensis</i>	T
<i>Arctotis arctotoides</i>	HP	<i>Athanasia crithmifolia</i>	S
<i>Arctotis aspera</i>	HP	<i>Athanasia dentata</i>	S
<i>Arctotis auriculata</i>	HP	<i>Athanasia parviflora</i>	S
<i>Arctotis fastuosa</i>	AN	<i>Athanasia trifurcata</i>	S
<i>Arctotis hirsuta</i>	AN	<i>Atriplex cinerea</i>	HP
<i>Arctotis hybrid</i>	HP	<i>Aulax cancellata</i>	P
<i>Arctotis laevis</i>	HP	<i>Aulax pallasia</i>	P
<i>Arctotis</i> sp. <i>nova</i> 'Silver lining'	HP	<i>Aulax umbellata</i>	P
<i>Arctotis stoechadifolia</i>	HP	<i>Avonia albissima</i>	SC
<i>Arctotis stoechadifolia</i> x <i>aspera</i>	HP	<i>Azima tetracantha</i>	S
<i>Arctotis venusta</i>	AN	<i>Babiana angustifolia</i>	B
<i>Argyroderma congregatum</i>	SC	<i>Babiana cedarbergensis</i>	B
<i>Argyroderma delaetii</i>	SC	<i>Babiana disticha</i>	B
<i>Argyroderma fissum</i>	SC	<i>Babiana nana</i>	B
<i>Argyroderma framesii</i> subsp. <i>framesii</i> SC		<i>Babiana patersoniae</i>	B
<i>Argyroderma framesii</i> subsp. <i>hallii</i>	SC	<i>Babiana pygmaea</i>	B
<i>Argyroderma pearsonii</i>	SC	<i>Babiana ringens</i>	B
<i>Argyroderma ringens</i>	SC	<i>Babiana rubrocyanea</i>	B
<i>Aristea ecklonii</i>	B	<i>Babiana stricta</i>	B
<i>Aristea major</i>	B	<i>Babiana tubulosa</i> var. <i>tubulosa</i>	B
<i>Artemisia afra</i>	HP	<i>Babiana villosa</i>	B
<i>Aspalathus aspalathoides</i>	S	<i>Ballota africana</i>	HP
<i>Aspalathus linearis</i> subsp. <i>linearis</i> —	S	<i>Barleria</i> 'Purple Prince'	HP
<i>Aspalathus nivea</i>	S	<i>Barleria albotellata</i>	S
<i>Aspalathus spicata</i>	S	<i>Barleria elegans</i>	HP
<i>Asparagus declinatus</i>	HP	<i>Barleria gueinzii</i>	HP
<i>Asparagus densiflorus</i>	HP	<i>Barleria mackenii</i>	S
<i>Asparagus densiflorus</i> 'Cwebe'	HP	<i>Barleria monticola</i>	HP
<i>Asparagus densiflorus</i> 'Flagstaff'	HP	<i>Barleria obtusa</i>	HP
<i>Asparagus densiflorus</i> 'Mazeppa'	HP	<i>Barleria repens</i>	HP
<i>Asparagus densiflorus</i> 'Meyersii'	HP	<i>Barleria rotundifolia</i>	S
<i>Asparagus densiflorus</i> 'Sprengeri'	HP	<i>Bauhinia bowkeri</i>	S
<i>Asparagus falcatus</i>	HP	<i>Bauhinia galpinii</i>	S
<i>Asparagus larinus</i>	HP	<i>Bauhinia natalensis</i>	S
<i>Asparagus oxyacanthus</i>	HP	<i>Bauhinia petersiana</i>	S
<i>Asparagus ramosissimus</i> 'Cascade'	HP	<i>Bauhinia tomentosa</i>	S

<i>Begonia sonderiana</i>	HP	<i>Calodendrum capense</i>	T
<i>Behnia reticulata</i>	C	<i>Calopsis paniculata</i>	R
<i>Berchemia zeyheri</i>	T	<i>Calpurnia aurea</i>	T
<i>Bergeranthus glenensis</i>	SC	<i>Calpurnia aurea</i> subsp. <i>aurea</i>	T
<i>Bergeranthus</i> sp.	SC	<i>Calpurnia villosa</i> var. <i>intrusa</i>	T
<i>Bersama lucens</i>	T	<i>Canthium inerme</i>	T
<i>Bersama tysoniana</i>	T	<i>Canthium mundianum</i>	T
<i>Berula erecta</i>	HP	<i>Carissa 'Green Carpet'</i>	S
<i>Berzelia abrotanoides</i>	S	<i>Carissa bispinosa</i>	S
<i>Berzelia galpinii</i>	S	<i>Carissa edulis</i>	S
<i>Berzelia intermedia</i>	S	<i>Carissa haematocarpa</i>	S
<i>Berzelia lanuginosa</i>	S	<i>Carissa macrocarpa</i>	S
<i>Bijlia dilatata</i> (B.cana)	SC	<i>Carpanthea pomeridiana</i>	SC
<i>Blechnum australe</i>	F	<i>Carpobrotus acinaciformis</i>	SC
<i>Blechnum punctulatum</i> 'Bosvaring'	F	<i>Carpobrotus deliciosus</i> subsp. <i>deliciosus</i>	SC
<i>Blechnum tabulare</i>	F	<i>Carpobrotus edulis</i> subsp. <i>edulis</i>	SC
<i>Bobartia aphylla</i>	b	<i>Carpobrotus muirii</i>	SC
<i>Bolusanthus speciosus</i>	T	<i>Carruanthus ringens</i>	SC
<i>Bonatea</i> sp.	O	<i>Carruanthus</i> sp.	SC
<i>Boophae disticha</i>	B	<i>Cassine aethiopica</i>	T
<i>Bowiea volubilis</i>	SC	<i>Cassine crocea</i>	T
<i>Bowkeria citrina</i>	S	<i>Cassine maritima</i>	S
<i>Bowkeria cymosa</i>	S	<i>Cassine papillosa</i>	T
<i>Bowkeria verticillata</i>	S	<i>Cassine peragua</i>	T
<i>Brabejum stellatifolium</i>	T	<i>Cassine tetragona</i>	T
<i>Brachylaena discolor</i>	T	<i>Cassinopsis ilicifolia</i>	T
<i>Brachylaena elliptica</i>	T	<i>Catha transvaalensis</i>	T
<i>Brachylaena neriifolia</i>	T	<i>Catunaregam spinosa</i>	T
<i>Brachylaena rotundata</i>	T	<i>Celtis africana</i>	T
<i>Braunsia apiculata</i>	SC	<i>Cenia turbinata</i> ( <i>Cotula turbinata</i> )	HP
<i>Braunsia geminata</i>	SC	<i>Cephalophyllum alstonii</i>	SC
<i>Breonadia salicina</i>	T	<i>Cephalophyllum aureorubrum</i>	SC
<i>Bridelia micrantha</i>	T	<i>Cephalophyllum caespitosum</i>	SC
<i>Brunia albiflora</i>	S	<i>Cephalophyllum ceresianum</i>	SC
<i>Brunia laevis</i>	S	<i>Cephalophyllum corniculatum</i>	SC
<i>Brunia nodiflora</i>	S	<i>Cephalophyllum curtrophyllum</i>	SC
<i>Brunia stokoei</i>	S	<i>Cephalophyllum middlemostii</i>	SC
<i>Brunsvigia orientalis</i>	B	<i>Cephalophyllum pillansii</i>	SC
<i>Buddleja auriculata</i>	S	<i>Cephalophyllum pillansii</i> var. <i>grandiflorum</i>	SC
<i>Buddleja glomerata</i>	S	<i>Cephalophyllum pulchellum</i>	SC
<i>Buddleja loricata</i>	S	<i>Cephalophyllum subulatooides</i>	SC
<i>Buddleja saligna</i>	T	<i>Ceraria fruticulosa</i>	SC
<i>Buddleja salviifolia</i>	S	<i>Ceraria namaquensis</i>	SC
<i>Bulbine abyssinica</i>	SC	<i>Ceratotheca triloba</i>	AN
<i>Bulbine frutescens</i>	SC	<i>Cerochlamys pachyphylla</i>	SC
<i>Bulbine latifolia</i>	SC	<i>Ceropegia barklyi</i>	SC
<i>Bulbine margarethae</i>	SC	<i>Ceropegia woodii</i>	SC
<i>Bulbine narcissifolia</i>	B	<i>Chaetacanthus setiger</i>	HP
<i>Bulbinella cauda-felis</i>	B	<i>Chaetacme aristata</i>	T
<i>Bulbinella latifolia</i> var. <i>doleritica</i>	B	<i>Chasmanthe aethiopica</i>	B
<i>Bulbinella nutans</i>	B	<i>Chasmanthe bicolor</i>	B
<i>Bulbophyllum scaberulum</i>	O	<i>Chasmanthe floribunda</i>	B
<i>Burchellia bubalina</i>	S	<i>Chasmanthe floribunda</i> var. <i>duckittii</i>	B
<i>Buxus macowanii</i>	S	<i>Chasmatophyllum musculinum</i>	SC

<i>Cheilanthes bergiana</i>	F	<i>Clivia gardenii</i>	B
<i>Cheilanthes eckloniana</i>	F	<i>Clivia miniata</i>	B
<i>Cheilanthes viridis</i> var. <i>viridis</i>	F	<i>Clivia miniata</i> var. <i>citrina</i>	B
<i>Cheiridopsis aspera</i>	SC	<i>Coddia rudis</i>	S
<i>Cheiridopsis brownii</i>	SC	<i>Coleonema album</i>	BU
<i>Cheiridopsis carinata</i>	SC	<i>Coleonema aspalathoides</i>	BU
<i>Cheiridopsis cigarettifera</i>	SC	<i>Coleonema calycinum</i>	BU
<i>Cheiridopsis denticulata</i>	SC	<i>Coleonema pulchellum</i>	BU
<i>Cheiridopsis derenbergiana</i>	SC	<i>Colpoon compressum</i>	S
<i>Cheiridopsis excavata</i>	SC	<i>Combretum bracteosum</i>	C
<i>Cheiridopsis imitans</i>	SC	<i>Combretum caffrum</i>	T
<i>Cheiridopsis peculiaris</i>	SC	<i>Combretum collinum</i> subsp. <i>suluense</i>	T
<i>Cheiridopsis pillansii</i>	SC	<i>Combretum erythrophyllum</i>	T
<i>Cheiridopsis pulverulenta</i>	SC	<i>Combretum kraussii</i>	T
<i>Cheiridopsis purpurata</i>	SC	<i>Combretum microphyllum</i>	C
<i>Cheiridopsis robusta</i>	SC	<i>Combretum molle</i>	T
<i>Cheiridopsis schlechteri</i>	SC	<i>Combretum vendae</i>	T
<i>Cheiridopsis speciosa</i>	SC	<i>Commiphora harveyi</i>	T
<i>Cheiridopsis turbinata</i>	SC	<i>Conicosia pugioniformis</i>	SC
<i>Cheiridopsis vanzylii</i>	SC	<i>Conophytum bilobum</i> subsp. <i>bilobum</i>	SC
<i>Cheiridopsis verrucosa</i>	SC	<i>Conophytum breve</i>	SC
<i>Chionanthus foveolatus</i> subsp. <i>foveolatus</i>	T	<i>Conophytum burgeri</i>	SC
<i>Chionanthus foveolatus</i> subsp. <i>major</i>	T	<i>Conophytum calculus</i> subsp. <i>calculus</i>	SC
<i>Chironia baccifera</i>	HP	<i>Conophytum flavum</i>	SC
<i>Chironia laxa</i>	HP	<i>Conophytum frutescens</i>	SC
<i>Chlorophytum comosum</i>	B	<i>Conophytum meyeri</i>	SC
<i>Chlorophytum krookianum</i>	B	<i>Conophytum minutum</i> var. <i>minutum</i>	SC
<i>Chlorophytum undulatum</i>	B	<i>Conophytum obcordellum</i>	SC
<i>Chondropetalum aggregatum</i>	R	<i>Conophytum quaesitum</i> subsp. <i>quaesitum</i>	SC
<i>Chondropetalum mucronatum</i>	R	<i>Conophytum subfenestratum</i>	SC
<i>Chondropetalum</i> sp. nova (469/84)	R	<i>Conophytum truncatum</i> subsp. <i>truncatum</i>	SC
<i>Chondropetalum tectorum</i>	R	<i>Conophytum uviforme</i>	SC
<i>Choristylis rhamnoides</i>	T	<i>Conophytum uviforme</i> var. <i>subincanum</i>	SC
<i>Chrysanthemoides incana</i>	S	<i>Conophytum velutinum</i> subsp. <i>velutinum</i>	SC
<i>Chrysanthemoides monilifera</i>	S	<i>Corallocarpus dissectus</i>	SC
<i>Chrysocoma coma-aurea</i>	HP	<i>Cotula lineariloba</i>	HP
<i>Chrysophyllum viridifolium</i>	T	<i>Cotyledon adscendens</i>	SC
<i>Cineraria saxifraga</i>	HP	<i>Cotyledon barbeyi</i>	SC
<i>Cissus quadrangularis</i>	SC	<i>Cotyledon campanulata</i>	SC
<i>Clausena anisata</i>	T	<i>Cotyledon orbiculata</i> var. <i>flanagani</i>	SC
<i>Clematis brachiata</i>	C	<i>Cotyledon orbiculata</i> var. <i>oblonga</i>	SC
<i>Clematis</i> x <i>Clematopsis</i>	C	<i>Cotyledon orbiculata</i> var. <i>orbiculata</i>	SC
<i>Clematopsis scabiosifolia</i>	HP	<i>Cotyledon orbiculata</i> var. <i>spuria</i>	SC
<i>Cleretum herrei</i>	SC	<i>Cotyledon papillaris</i>	SC
<i>Cleretum papulosum</i>	SC	<i>Cotyledon tomentosa</i> subsp. <i>tomentosa</i>	SC
<i>Cleretum papulosum</i> subsp. <i>shlechteri</i>	SC	<i>Cotyledon velutina</i>	SC
<i>Clerodendrum glabrum</i>	S	<i>Cotyledon woodii</i>	SC
<i>Clerodendrum myricoides</i>	S	<i>Crassula alba</i>	SC
<i>Clerodendrum ugandense</i>	S	<i>Crassula arborescens</i> subsp. <i>undulatifolia</i>	SC
<i>Cliffortia ericifolia</i>	S	<i>Crassula atropurpurea</i> var. <i>muirii</i>	SC
<i>Cliffortia ferruginea</i>	HP	<i>Crassula atropurpurea</i> var. <i>watermeyeri</i>	SC
<i>Cliffortia graminea</i>	S	<i>Crassula barklyi</i>	SC
<i>Cliffortia obcordata</i>	S	<i>Crassula capitella</i> subsp. <i>thyrsiflora</i>	SC
<i>Cliffortia odorata</i>	S	<i>Crassula ciliata</i>	SC

<i>Crassula coccinea</i>	SC	<i>Cussonia sphaerocephala</i>	T
<i>Crassula cultrata</i>	SC	<i>Cussonia spicata</i>	T
<i>Crassula cymosa</i>	SC	<i>Cussonia thyrsoiflora</i>	T
<i>Crassula deceptor</i>	SC	<i>Cussonia transvaalensis</i>	T
<i>Crassula dejecta</i>	SC	<i>Cyanella alba</i>	B
<i>Crassula ericoides</i> subsp. <i>ericoides</i>	SC	<i>Cyanella lutea</i>	B
<i>Crassula expansa</i> subsp. <i>fragilis</i>	SC	<i>Cyanella orchidiformis</i>	B
<i>Crassula flanaganii</i>	SC	<i>Cyathea dregei</i>	F
<i>Crassula garibina</i>	SC	<i>Cyclopia maculata</i>	S
<i>Crassula lanuginosa</i> var. <i>pachystemon</i>	SC	<i>Cylindrophyllym dyeri</i>	SC
<i>Crassula macowaniana</i>	SC	<i>Cylindrophyllym tugwelliae</i>	SC
<i>Crassula multicava</i>	SC	<i>Cyperus albo-straitus</i>	HP
<i>Crassula multiflora</i>	SC	<i>Cyperus prolifer</i>	HP
<i>Crassula muscosa</i>	SC	<i>Cyperus</i> sp.	HP
<i>Crassula nudicaulis</i>	SC	<i>Cyperus textilis</i>	HP
<i>Crassula orbicularis</i>	SC	<i>Cyphostemma bainesii</i>	SC
<i>Crassula ovata</i>	SC	<i>Cyphostemma juttae</i>	SC
<i>Crassula pellucida</i> subsp. <i>marginalis</i>	SC	<i>Cyphostemma simulans</i>	SC
<i>Crassula pelludica</i> subsp. <i>brachypetala</i>	SC	<i>Cyphostemma woodii</i>	SC
<i>Crassula perfoliata</i> var. <i>minor</i>	SC	<i>Cyrtanthus brachyscyphus</i>	B
<i>Crassula perfoliata</i> var. <i>perfoliata</i>	SC	<i>Cyrtanthus elatus</i>	B
<i>Crassula perforata</i>	SC	<i>Cyrtanthus falcatus</i>	B
<i>Crassula pubescens</i> subsp. <i>radicans</i>	SC	<i>Cyrtanthus herrei</i>	B
<i>Crassula rogersii</i>	SC	<i>Cyrtanthus mackenii</i>	B
<i>Crassula rubricaulis</i>	SC	<i>Cyrtanthus mackenii</i> var. <i>cooperi</i>	B
<i>Crassula rupestris</i> subsp. <i>marnierana</i>	SC	<i>Cyrtanthus obrienii</i>	B
<i>Crassula sarcocaulis</i> subsp. <i>rupicola</i>	SC	<i>Cyrtanthus sanguineus</i>	B
<i>Crassula sarcocaulis</i> subsp. <i>sarcocaulis</i>	SC	<i>Cyrtomium caryotideum</i> var. <i>micropterum</i>	F
<i>Crassula scabra</i>	SC	<i>Dais cotinifolia</i>	T
<i>Crassula spathulata</i>	SC	<i>Dalbergia armata</i>	C
<i>Crassula subaphylla</i>	SC	<i>Dalbergia obovata</i>	C
<i>Crassula subulata</i>	SC	<i>Delosperma ashtonii</i>	SC
<i>Crassula tetragona</i> subsp. <i>acutifolia</i>	SC	<i>Delosperma laxipetalum</i>	SC
<i>Crassula tetragona</i> subsp. <i>robusta</i>	SC	<i>Delosperma luteum</i>	SC
<i>Crassula tetragona</i> subsp. <i>tetragona</i>	SC	<i>Delosperma lydenburgense</i>	SC
<i>Crinum bulbispermum</i>	B	<i>Delosperma minimum</i>	SC
<i>Crinum campanulatum</i>	B	<i>Delosperma patersoniae</i>	SC
<i>Crinum macowanii</i>	B	<i>Delosperma pottsii</i>	SC
<i>Crinum moorei</i>	B	<i>Delosperma prasinum</i>	SC
<i>Crocoshmia aurea</i>	B	<i>Delosperma pruinolum</i>	SC
<i>Crotalaria capensis</i>	S	<i>Delosperma rogersii</i>	SC
<i>Croton gratissimus</i>	T	<i>Delosperma uncinatum</i>	SC
<i>Croton megalobotrys</i>	T	<i>Dialium schlechteri</i>	T
<i>Croton sylvaticus</i>	T	<i>Dianthus basuticus</i> subsp. <i>basuticus</i>	HP
<i>Cryptocarya latifolia</i>	T	<i>Dianthus caespitosus</i>	HP
<i>Cryptocarya liebertaina</i>	T	<i>Dianthus</i> sp.	HP
<i>Cryptocarya myrtifolia</i>	T	<i>Dianthus zeyheri</i>	HP
<i>Cryptocarya woodii</i>	T	<i>Diascia</i> 'Ruby Fields'	HP
<i>Cryptocarya wyliei</i>	T	<i>Diascia</i> 'Salmon Supreme'	HP
<i>Cunonia capensis</i>	T	<i>Diascia barberae</i>	HP
<i>Curtisia dentata</i>	T	<i>Diascia fetcaniensis</i>	HP
<i>Cussonia natalensis</i>	T	<i>Diascia integerrima</i>	HP
<i>Cussonia paniculata</i>	T	<i>Diascia mollis</i>	HP
<i>Cussonia paniculata</i> subsp. <i>sinuata</i>	T	<i>Diascia rigescens</i>	HP

<i>Diascia vigilis</i>	HP	<i>Dombeya burgessiae</i>	S
<i>Diastella buekii</i>	P	<i>Dombeya cymosa</i>	T
<i>Dicoma zeyheri</i>	HP	<i>Dombeya pulchra</i>	S
<i>Dierama floriferum</i>	B	<i>Dombeya rotundifolia</i>	T
<i>Dierama pendulum</i>	B	<i>Dombeya tiliacea</i>	S
<i>Dierama pulcherrimum</i>	B	<i>Dorotheanthus bellidiformis</i>	AN
<i>Dierama robustum</i>	B	<i>Dorotheanthus gramineus</i>	AN
<i>Dietes bicolor</i>	B	<i>Dovyalis caffra</i>	S
<i>Dietes butcheriana</i>	B	<i>Dovyalis longispina</i>	T
<i>Dietes flavida</i>	B	<i>Dovyalis rhamnoides</i>	S
<i>Dietes grandiflora</i>	B	<i>Dovyalis zeyheri</i>	T
<i>Dietes iridioides</i>	B	<i>Dracaena aletriformis</i>	S
<i>Dimorphotheca cuneata</i>	HP	<i>Dracaena mannii</i>	T
<i>Dimorphotheca pluvialis</i>	AN	<i>Drimiopsis maculata</i>	B
<i>Dimorphotheca sinuata</i>	AN	<i>Drosanthemum bellum</i>	SC
<i>Dinteranthus inexpectatus</i>	SC	<i>Drosanthemum bicolor</i>	SC
<i>Dinteranthus microspermus</i>	SC	<i>Drosanthemum floribundum</i>	SC
<i>Dinteranthus puberulus</i>	SC	<i>Drosanthemum hispidum</i>	SC
<i>Dinteranthus vanzylii</i>	SC	<i>Drosanthemum micans</i>	SC
<i>Dinteranthus wilmsianus</i>	SC	<i>Drosanthemum speciosum</i>	SC
<i>Dioscorea elephantipes</i>	SC	<i>Drosanthemum striatum</i>	SC
<i>Dioscorea hemicypta</i>	SC	<i>Drosanthemum thudichumii</i>	SC
<i>Dioscorea sylvatica</i>	SC	<i>Drosanthemum tuberculiferum</i>	SC
<i>Diosma acmaeophylla</i>	BU	<i>Dryopteris inaequalis</i>	F
<i>Diosma haelkraalensis</i>	BU	<i>Duvernoia aconitiflora</i>	S
<i>Diospyros austro-africana</i>	S	<i>Duvernoia adhatodoides</i>	S
<i>Diospyros dichrophylla</i>	S	<i>Dymondia margaretae</i>	HP
<i>Diospyros glabra</i>	S	<i>Dyschoriste rogersii</i>	S
<i>Diospyros lycioides</i>	S	<i>Eberlanzia spinosa</i>	SC
<i>Diospyros lycioides subsp. guerkei</i>	S	<i>Ehretia rigida</i>	S
<i>Diospyros lycioides subsp. lycioides</i>	S	<i>Ekebergia capensis</i>	T
<i>Diospyros natalensis</i>	T	<i>Ekebergia pterophylla</i>	T
<i>Diospyros pallens</i>	S	<i>Elaphoglossum macropodium</i>	F
<i>Diospyros rotundifolia</i>	T	<i>Elegia capensis</i>	R
<i>Diospyros scabrida</i>	S	<i>Elegia cuspidata</i>	R
<i>Diospyros scabrida var. cordata</i>	T	<i>Elegia equisetacea</i>	R
<i>Diospyros simii</i>	S	<i>Elegia fenestrata</i>	R
<i>Diospyros villosa</i>	S	<i>Elegia grandispicata</i>	R
<i>Diospyros whyteana</i>	T	<i>Elegia racemosa</i>	R
<i>Disa 'Kewensis'</i>	O	<i>Elegia stipularis</i>	R
<i>Disa 'Kirstenbosch Pride'</i>	O	<i>Elephantorrhiza elephantina</i>	HP
<i>Disa atricapilla</i>	O	<i>Elytropappus rhinocerotis</i>	S
<i>Disa cardinalis</i>	O	<i>Encephalartos altensteinii</i>	CY
<i>Disa glandulosa</i>	O	<i>Encephalartos caffer</i>	CY
<i>Disa racemosa</i>	O	<i>Encephalartos cycadifolius</i>	CY
<i>Disa sagittalis</i>	O	<i>Encephalartos ferox</i>	CY
<i>Disa tripetaloides</i>	O	<i>Encephalartos fiderici-guilielmi</i>	CY
<i>Disa uniflora</i>	O	<i>Encephalartos ghellinckii</i>	CY
<i>Disa veitchii</i>	O	<i>Encephalartos horridus</i>	CY
<i>Disa venosa</i>	O	<i>Encephalartos humilis</i>	CY
<i>Dissotis canescens</i>	HP	<i>Encephalartos lanatus</i>	CY
<i>Dissotis princeps</i>	HP	<i>Encephalartos lebomboensis</i>	CY
<i>Dodonaea angustifolia</i>	S	<i>Encephalartos lehmannii</i>	CY
<i>Dombeya autumnalis</i>	S	<i>Encephalartos longifolius</i>	CY

Encephalartos manikensis	CY	Erica ericoides	E
Encephalartos natalensis	CY	Erica esterhuyseniae	E
Encephalartos paucidentatus	CY	Erica fairii	E
Encephalartos princeps	CY	Erica fascicularis	E
Encephalartos transvenosus	CY	Erica ferrea	E
Encephalartos trispinosus	CY	Erica flacca	E
Encephalartos umbeluziensis	CY	Erica floccifera	E
Encephalartos villosus	CY	Erica foliacea	E
Englerophytum magalismontanum	T	Erica fontana	E
Englerophytum natalense	T	Erica formosa	E
Ensete ventricosum	T	Erica gallorum	E
Entandrophragma caudatum	T	Erica georgica	E
Eremia totta	E	Erica gilva	E
Erepsia anceps	SC	Erica glandulosa	E
Erica abietina	E	Erica glauca var. elegans	E
Erica acuta	E	Erica glauca var. glauca	E
Erica annectens	E	Erica glomiflora	E
Erica articularis	E	Erica gnaphaloides	E
Erica axilliflora	E	Erica gracilis	E
Erica baccans	E	Erica grandiflora	E
Erica banksia	E	Erica grata	E
Erica bauera	E	Erica haematocodon	E
Erica bergiana	E	Erica halicacaba	E
Erica blandfordia	E	Erica hebecalyx	E
Erica bolusiae	E	Erica heleophila	E
Erica borboniifolia	E	Erica hirtiflora	E
Erica brachialis	E	Erica hispidula	E
Erica bruniifolia	E	Erica imbricata	E
Erica caffra	E	Erica intonsa	E
Erica calycina	E	Erica junonia	E
Erica canaliculata	E	Erica junonia var. minor	E
Erica capensis	E	Erica laeta	E
Erica capitata	E	Erica lanata	E
Erica cerinthoides	E	Erica lateralis	E
Erica chloroloma	E	Erica leptopus	E
Erica clavisepala	E	Erica leucantha	E
Erica coarctata	E	Erica leucotrachela	E
Erica coccinea	E	Erica limosa	E
Erica colorans	E	Erica longifolia	E
Erica cruenta	E	Erica longimontana	E
Erica cubica	E	Erica lucida	E
Erica curviflora	E	Erica lutea	E
Erica curvirostris	E	Erica mammosa	E
Erica cyathiformis	E	Erica margaritacea	E
Erica cyrilliflora	E	Erica massonii	E
Erica daphniiflora	E	Erica mauritanica	E
Erica deflexa	E	Erica mollis	E
Erica demissa	E	Erica monadelpha	E
Erica densifolia	E	Erica nana	E
Erica denticulata	E	Erica nevillei	E
Erica dianthifolia	E	Erica nubigena	E
Erica diaphana	E	Erica nudiflora	E
Erica discolor	E	Erica oblongiflora	E
Erica empetrina	E	Erica ostiaria	E

<i>Erica paludicola</i>	E	<i>Euclea crispa</i> subsp. <i>crispa</i>	T
<i>Erica parviflora</i>	E	<i>Euclea natalensis</i>	T
<i>Erica patersonia</i>	E	<i>Euclea pseudebenus</i>	T
<i>Erica perlata</i>	E	<i>Eucomis autumnalis</i>	B
<i>Erica perspicua</i>	E	<i>Eucomis hybrid</i>	B
<i>Erica peziza</i>	E	<i>Eucomis montana</i>	B
<i>Erica phyllicifolia</i>	E	<i>Eucomis pole-evansii</i>	B
<i>Erica pillansii</i>	E	<i>Eugenia natalitia</i> (E. <i>capensis</i> subsp. <i>natalitia</i> )	T
<i>Erica pinea</i>	E	<i>Eugenia zeyheri</i> (E. <i>capensis</i> subsp. <i>zeyheri</i> )	T
<i>Erica plukenetii</i>	E	<i>Eulophia ovalis</i>	O
<i>Erica propinqua</i>	E	<i>Eulophia petersii</i>	O
<i>Erica quadrangularis</i>	E	<i>Eulophia speciosa</i>	O
<i>Erica recta</i>	E	<i>Eulophia streptopetala</i>	O
<i>Erica regia</i> var. <i>variegata</i>	E	<i>Eulophia tuberculata</i>	O
<i>Erica retorta</i>	E	<i>Eumorphia prostrata</i>	HP
<i>Erica savilea</i>	E	<i>Euphorbia burmannii</i>	SC
<i>Erica scabriuscula</i>	E	<i>Euphorbia caput-medusae</i>	SC
<i>Erica senilis</i>	E	<i>Euphorbia clava</i>	SC
<i>Erica sessiliflora</i>	E	<i>Euphorbia enopla</i>	SC
<i>Erica sitiens</i>	E	<i>Euphorbia horrida</i> var. <i>horrida</i>	SC
<i>Erica sonora</i>	E	<i>Euphorbia obesa</i>	SC
<i>Erica sparmannii</i>	E	<i>Euphorbia pentagona</i>	SC
<i>Erica sparsa</i>	E	<i>Euphorbia schoenlandii</i>	SC
<i>Erica speciosa</i>	E	<i>Euryops abrotanifolius</i>	S
<i>Erica spectabilis</i>	E	<i>Euryops annae</i>	S
<i>Erica sphaerocephala</i>	E	<i>Euryops chrysanthemoides</i>	S
<i>Erica sphaeroides</i>	E	<i>Euryops chrysanthemoides</i> x E. <i>pectinatus</i>	S
<i>Erica subdivaricata</i>	E	<i>Euryops linearis</i>	S
<i>Erica taxifolia</i>	E	<i>Euryops pectinatus</i> subsp. <i>pectinatus</i>	S
<i>Erica tenuis</i>	E	<i>Euryops speciosissimus</i>	S
<i>Erica thimifolia</i>	E	<i>Euryops tysonii</i>	S
<i>Erica thomae</i>	E	<i>Euryops virgineus</i>	S
<i>Erica triflora</i>	E	<i>Faidherbia albida</i>	T
<i>Erica tristis</i>	E	<i>Falkia repens</i>	hp
<i>Erica tumida</i>	E	<i>Faucaria albidens</i>	SC
<i>Erica turgida</i>	E	<i>Faucaria bosscheana</i>	SC
<i>Erica urna-viridis</i>	E	<i>Faucaria britteniae</i>	SC
<i>Erica uysii</i>	E	<i>Faucaria felina</i>	SC
<i>Erica ventricosa</i>	E	<i>Faucaria hooleae</i>	SC
<i>Erica verecunda</i>	E	<i>Faucaria sub-integra</i>	SC
<i>Erica versicolor</i>	E	<i>Faucaria tigrina</i>	SC
<i>Erica verticillata</i>	E	<i>Faucaria tuberculosa</i>	SC
<i>Erica viridescens</i> var. <i>viridescens</i>	E	<i>Faurea saligna</i>	T
<i>Erica viridiflora</i>	E	<i>Faurea speciosa</i>	T
<i>Eriocephalus africanus</i>	S	<i>Felicia aethiopica</i>	HP
<i>Eriocephalus ericoides</i>	S	<i>Felicia aethiopica</i> subsp. <i>aethiopica</i>	HP
<i>Eriocephalus racemosus</i>	S	<i>Felicia amelloides</i> 'White'	HP
<i>Erythrina caffra</i>	T	<i>Felicia bergerana</i>	HP
<i>Erythrina livingstoniana</i>	T	<i>Felicia dubia</i>	AN
<i>Erythrina lysistemon</i>	T	<i>Felicia echinata</i>	HP
<i>Erythrina zeyheri</i>	S	<i>Felicia elongata</i>	HP
<i>Erythrophysa transvaalensis</i>	T	<i>Felicia erigeroides</i>	HP
<i>Erythroxylum pictum</i>	T	<i>Felicia filifolia</i>	HP
<i>Euchaetis meridionalis</i>	BU	<i>Felicia heterophylla</i>	AN

<i>Felicia linifolia</i>	HP	<i>Gasteria pillansii</i> var. <i>pillansii</i>	SC
<i>Felicia petiolata</i>	HP	<i>Gasteria pillansii</i> var. <i>ernesti-ruschii</i>	SC
<i>Fenestraria aurantiaca</i>	SC	<i>Gasteria pulchra</i>	SC
<i>Fenestraria rhopalophylla</i>	SC	<i>Gasteria rawlinsonii</i>	SC
<i>Ficinia truncata</i>	HP	<i>Gasteria vlokii</i>	SC
<i>Ficus bizanae</i>	T	<i>Gazania hybrid</i>	HP
<i>Ficus burtt-davyi</i>	T	<i>Gazania krebsiana</i>	HP
<i>Ficus burtt-davyi</i> 'Cango'	T	<i>Gazania linearis</i> hybrid	HP
<i>Ficus cordata</i>	T	<i>Gazania linearis</i> var. <i>linearis</i>	HP
<i>Ficus craterostoma</i>	T	<i>Gazania maritima</i>	HP
<i>Ficus lutea</i>	T	<i>Gazania rigens</i> var. <i>rigens</i>	HP
<i>Ficus natalensis</i>	T	<i>Gazania rigens</i> var. <i>uniflora</i>	HP
<i>Ficus pygmaea</i>	T	<i>Geissorhiza aspera</i>	B
<i>Ficus sansibarica</i>	T	<i>Geissorhiza darlingensis</i>	B
<i>Ficus stuhlmannii</i>	T	<i>Geissorhiza eury stigma</i>	B
<i>Ficus sur</i>	T	<i>Geissorhiza imbricata</i>	B
<i>Ficus sycomorus</i>	T	<i>Geissorhiza inflexa</i>	B
<i>Ficus thonningii</i>	T	<i>Geissorhiza mathewsii</i>	B
<i>Ficus trichopoda</i>	T	<i>Geissorhiza monanthos</i>	B
<i>Ficus verruculosa</i>	T	<i>Geissorhiza radians</i>	B
<i>Fockea edulis</i>	SC	<i>Geissorhiza splendidissima</i>	B
<i>Freesia alba</i>	B	<i>Geissorhiza tulbaghensis</i>	B
<i>Freesia corymbosa</i>	B	<i>Geranium incanum</i>	HP
<i>Freesia refracta</i>	B	<i>Geranium wakkerstroomianum</i>	HP
<i>Freesia</i> sp. (Yellow)	B	<i>Gerbera cordata</i>	HP
<i>Freylinia densiflora</i>	S	<i>Gerbera jamesonii</i>	HP
<i>Freylinia lanceolata</i>	S	<i>Gerbera viridifolia</i>	HP
<i>Freylinia longiflora</i>	S	<i>Gerrardanthus macrorhizus</i>	SC
<i>Freylinia tropica</i>	S	<i>Gethyllis ciliaris</i>	B
<i>Freylinia undulata</i>	S	<i>Gibbaeum album</i>	SC
<i>Freylinia visseri</i>	S	<i>Gibbaeum angulipes</i>	SC
<i>Galpinia transvaalica</i>	T	<i>Gibbaeum austricum</i>	SC
<i>Galttonia candicans</i>	B	<i>Gibbaeum dispar</i>	SC
<i>Garcinia gerrardii</i>	S	<i>Gibbaeum gibbosum</i>	SC
<i>Gardenia cornuta</i>	S	<i>Gibbaeum heathii</i>	SC
<i>Gardenia thunbergia</i>	S	<i>Gibbaeum pachypodium</i>	SC
<i>Gardenia volkensii</i>	S	<i>Gibbaeum petrense</i>	SC
<i>Gasteria acinacifolia</i>	SC	<i>Gibbaeum pubescens</i> subsp. <i>shandii</i>	SC
<i>Gasteria batesiana</i>	SC	<i>Gibbaeum velutinum</i>	SC
<i>Gasteria baylissiana</i>	SC	<i>Gladiolus</i> 'Chopin'	B
<i>Gasteria bicolor</i>	SC	<i>Gladiolus alatus</i>	B
<i>Gasteria bicolor</i> var. <i>bicolor</i>	SC	<i>Gladiolus alatus</i> var. <i>meliusculus</i>	B
<i>Gasteria bicolor</i> var. <i>liliputana</i>	SC	<i>Gladiolus angustus</i>	B
<i>Gasteria brachyphylla</i>	SC	<i>Gladiolus aureus</i>	B
<i>Gasteria brachyphylla</i> var. <i>bayeri</i>	SC	<i>Gladiolus carinatus</i>	B
<i>Gasteria carinata</i>	SC	<i>Gladiolus carneus</i>	B
<i>Gasteria carinata</i> var. <i>verrucosa</i>	SC	<i>Gladiolus carneus</i>	B
<i>Gasteria croucheri</i>	SC	<i>Gladiolus caryophyllaceus</i>	B
<i>Gasteria disticha</i>	SC	<i>Gladiolus dalenii</i>	B
<i>Gasteria ellaphieae</i>	SC	<i>Gladiolus debilis</i> var. <i>cochleatus</i>	B
<i>Gasteria excelsa</i>	SC	<i>Gladiolus elliotii</i>	B
<i>Gasteria glomerata</i>	SC	<i>Gladiolus equitans</i>	B
<i>Gasteria nitida</i> var. <i>armstrongii</i>	SC	<i>Gladiolus floribundus</i>	B
<i>Gasteria nitida</i> var. <i>nitida</i>	SC	<i>Gladiolus floribundus</i> subsp. <i>miniatus</i>	B

<i>Gladiolus gracilis</i>	B	<i>Haworthia attenuata</i>	SC
<i>Gladiolus gracilis</i> var. <i>latifolius</i>	B	<i>Haworthia bolusii</i> var. <i>blackbeardiana</i>	SC
<i>Gladiolus huttonii</i>	B	<i>Haworthia chloracantha</i> var. <i>chloracantha</i>	SC
<i>Gladiolus liliaceus</i>	B	<i>Haworthia chloracantha</i> var. <i>subglauca</i>	SC
<i>Gladiolus liliaceus</i> hybrid	B	<i>Haworthia coarctata</i>	SC
<i>Gladiolus papilio</i>	B	<i>Haworthia coarctata</i> var. <i>adelaidensis</i>	SC
<i>Gladiolus priorii</i>	B	<i>Haworthia coarctata</i> var. <i>coarctata</i> forma SC	
<i>Gladiolus pritzelii</i>	B	<i>Haworthia cooperi</i> var. <i>cooperi</i>	SC
<i>Gladiolus quadrangularis</i>	B	<i>Haworthia cooperi</i> var. <i>leightonii</i>	SC
<i>Gladiolus quadrangulus</i>	B	<i>Haworthia cymbiformis</i> var. <i>cymbiformis</i>	SC
<i>Gladiolus rogersii</i>	B	<i>Haworthia cymbiformis</i> var. <i>cymbiformis</i> forma	
<i>Gladiolus saccatus</i>	B	<i>ramosa</i>	SC
<i>Gladiolus scullyi</i>	B	<i>Haworthia cymbiformis</i> var. <i>umbraticola</i>	SC
<i>Gladiolus stefaniae</i>	B	<i>Haworthia fasciata</i>	SC
<i>Gladiolus tenellus</i>	B	<i>Haworthia glabrata</i>	SC
<i>Gladiolus tristis</i>	B	<i>Haworthia glauca</i> var. <i>glauca</i>	SC
<i>Gladiolus watermeyerii</i>	B	<i>Haworthia glauca</i> var. <i>herrei</i>	SC
<i>Gladiolus watsonius</i>	B	<i>Haworthia herbacea</i>	SC
<i>Gloriosa superba</i>	B	<i>Haworthia limifolia</i>	SC
<i>Glottiphyllum depressum</i>	SC	<i>Haworthia longiana</i>	SC
<i>Glottiphyllum difforme</i>	SC	<i>Haworthia magnifica</i> var. <i>maraisii</i>	SC
<i>Glottiphyllum herrei</i>	SC	<i>Haworthia marumiana</i>	SC
<i>Glottiphyllum linguiforme</i>	SC	<i>Haworthia nigra</i>	SC
<i>Glottiphyllum longum</i>	SC	<i>Haworthia pumila</i>	SC
<i>Glottiphyllum nelii</i>	SC	<i>Haworthia radula</i>	SC
<i>Glottiphyllum oligocarpum</i>	SC	<i>Haworthia reinwardtii</i>	SC
<i>Glottiphyllum regium</i>	SC	<i>Haworthia reticulata</i>	SC
<i>Glottiphyllum surrectum</i>	SC	<i>Haworthia retusa</i>	SC
<i>Gnidia juniperifolia</i> 'Yellow Stars'	S	<i>Haworthia scabra</i> var. <i>scabra</i>	SC
<i>Gnidia squarrosa</i>	S	<i>Haworthia translucens</i> subsp. <i>tenera</i>	SC
<i>Gomphostigma virgatum</i>	S	<i>Haworthia truncata</i>	SC
<i>Gonioma kamassi</i>	T	<i>Haworthia turgida</i>	SC
<i>Grewia caffra</i>	S	<i>Haworthia venosa</i>	SC
<i>Grewia flavescens</i> var. <i>flavescens</i>	S	<i>Haworthia venosa</i> subsp. <i>tesselata</i>	SC
<i>Grewia hispida</i>	S	<i>Haworthia viscosa</i>	SC
<i>Grewia occidentalis</i>	S	<i>Hebenstretia dura</i>	HP
<i>Grewia retinervis</i>	S	<i>Helichrysum</i> 'Silver Lace'	HP
<i>Grewia robusta</i>	S	<i>Helichrysum argyrophyllum</i>	HP
<i>Greyia flanaganii</i>	S	<i>Helichrysum chionosphaerum</i>	HP
<i>Greyia radlkoferi</i>	S	<i>Helichrysum cymosum</i>	HP
<i>Greyia sutherlandii</i>	S	<i>Helichrysum dasyanthum</i>	HP
<i>Gyrocarpus americanus</i>	T	<i>Helichrysum petiolare</i>	HP
<i>Haemanthus albilos</i>	B	<i>Helichrysum petiolare</i> 'Limelight'	HP
<i>Haemanthus coccineus</i>	B	<i>Helichrysum populifolium</i>	HP
<i>Haemanthus deformis</i>	B	<i>Helichrysum setosum</i>	HP
<i>Haemanthus montanus</i>	B	<i>Helichrysum splendidum</i>	HP
<i>Haemanthus pubescens</i>	B	<i>Helichrysum sutherlandii</i>	HP
<i>Haemanthus sanguineus</i>	B	<i>Helichrysum teretifolium</i>	HP
<i>Halleria elliptica</i>	S	<i>Helichrysum wilmsii</i>	HP
<i>Halleria lucida</i>	T	<i>Heliophila coronopifolia</i>	AN
<i>Haplocarpha scaposa</i>	HP	<i>Hemizygia canescens</i>	HP
<i>Harpephyllum caffrum</i>	T	<i>Hemizygia obermeyeriae</i>	HP
<i>Haworthia angustifolia</i>	SC	<i>Hemizygia petiolata</i>	HP
<i>Haworthia angustifolia</i> forma <i>baylisii</i>	SC	<i>Hemizygia rehmannii</i> x <i>obermeyeriae</i>	

'Kirstenbosch'	S	Indigofera natalensis	S
Hemizygia teucrifolia	HP	Ipomoea albiwenia	C
Hemizygia transvaalensis	HP	Ischyrolepis sieberi	R
Hereroa calycina	SC	Ischyrolepis sp.	R
Hereroa fimbriata	SC	Ischyrolepis subverticillata	R
Hereroa teretifolia	SC	Ixia campanulata	B
Hereroa tugwelliae	SC	Ixia conferta var. ochroleuca	B
Hermannia pinnata	HP	Ixia curta	B
Hermannia saccifera	HP	Ixia dubia	B
Hermannia stricta	HP	Ixia flexuosa	B
Hesperantha bachmannii	B	Ixia frederickii	B
Hesperantha cucullata	B	Ixia maculata	B
Hesperantha erecta	B	Ixia patens	B
Hesperantha falcata	B	Ixia polystachya	B
Hesperantha vaginata	B	Ixia rapunculoides	B
Heterolepis aliena	S	Ixia viridiflora	B
Heteromorpha arborescens	T	Jasminum angulare	C
Heteromorpha trifoliata	T	Jasminum breviflorum	C
Heteropyxis natalensis	T	Jasminum glaucum	S
Hexalobus monopetalus	T	Jasminum multipartitum (climber)	C
Heywoodia lucens	T	Jasminum multipartitum (rambler)	S
Hibiscus diversifolius	S	Jasminum stenolobum	C
Hibiscus ludwigii	S	Jordaaniella clavifolia	SC
Hibiscus pedunculatus	S	Jordaaniella cuprea	SC
Hibiscus tiliaceus	S	Jordaaniella dubia	SC
Homalium dentatum	T	Justicia campylostemon	S
Homeria collina	B	Justicia petiolaris	S
Homeria comptonii	B	Justicia petiolaris subsp. bowiei	S
Homeria elegans	B	Kalanchoe brachyloba	SC
Homeria ochroleuca	B	Kalanchoe crundallii	SC
Huernia sp.	SC	Kalanchoe longiflora	SC
Hyaenanche globosa	S	Kalanchoe paniculata	SC
Hymenogyne glabra	SC	Kalanchoe rotundifolia	SC
Hymenolepis parviflora	S	Kalanchoe thyrsiflora	SC
Hypericum revolutum	S	Karomia speciosa forma speciosa	S
Hypericum roeperianum	S	Kedrostis nana	SC
Hypericum roeperianum var. roeperianum	S	Kigelia africana	T
Hypocalyptus sophoroides	S	Kiggelaria africana	T
Hypoestes aristata	HP	Kirkia acuminata	T
Hypoestes aristata 'Purple Haze'	HP	Kirkia wilmsii	T
Hypoestes forskalii	HP	Kleinia stapeliiformis	SC
Hypolepis sparsisora	F	Kniphofia baurii	B
Hypoxis hemerocallidea	B	Kniphofia garden hybrid	B
Hypoxis iridifolia	B	Kniphofia laxiflora	B
Hypoxis rigidula var. pilosissima	B	Kniphofia linearifolia	B
Hypoxis villosa	B	Kniphofia praecox	B
Ilex mitis	T	Kniphofia sarmentosa	B
Impatiens flanaganiae	HP	Kniphofia uvaria	B
Impatiens hochstetteri	HP	Knowltonia vesicatoria	HP
Impatiens sylvicola	HP	Kraussia floribunda	S
Impatiens zombensis	HP	Lachenalia aloides	B
Indigofera frutescens	S	Lachenalia aloides var. aurea	B
Indigofera langebergensis	S	Lachenalia aloides var. quadricolor	B
Indigofera lyalli	S	Lachenalia arbuthnotiae	B

<i>Lachenalia bachmannii</i>	B	<i>Leonotis ocymifolia</i>	HP
<i>Lachenalia bulbifera</i>	B	<i>Leucadendron</i> 'Safari Sunset'	P
<i>Lachenalia capensis</i>	B	<i>Leucadendron</i> 'Candles'	P
<i>Lachenalia contaminata</i>	B	<i>Leucadendron</i> 'Duet'	P
<i>Lachenalia elegans</i>	B	<i>Leucadendron</i> 'Petite'	P
<i>Lachenalia fistulosa</i>	B	<i>Leucadendron</i> 'Winter Red'	P
<i>Lachenalia framesii</i>	B	<i>Leucadendron arcuatum</i>	P
<i>Lachenalia liliflora</i>	B	<i>Leucadendron argenteum</i>	P
<i>Lachenalia liliflora hybrid</i>	B	<i>Leucadendron brunioides</i>	P
<i>Lachenalia mathewsii</i>	B	<i>Leucadendron burchellii</i>	P
<i>Lachenalia mutabilis</i>	B	<i>Leucadendron chamelaea</i>	P
<i>Lachenalia namaquensis</i>	B	<i>Leucadendron comosum</i> var. <i>homaeophyllum</i>	P
<i>Lachenalia namibiensis</i>	B	<i>Leucadendron conicum</i>	P
<i>Lachenalia orchiioides</i> var. <i>glaucina</i>	B	<i>Leucadendron coniferum</i>	P
<i>Lachenalia orchiioides</i> var. <i>orchiioides</i>	B	<i>Leucadendron cryptocephalum</i>	P
<i>Lachenalia orthopetala</i>	B	<i>Leucadendron daphnoides</i>	P
<i>Lachenalia pallida</i>	B	<i>Leucadendron discolor</i>	P
<i>Lachenalia patula</i>	B	<i>Leucadendron eucalyptifolium</i>	P
<i>Lachenalia peersii</i>	B	<i>Leucadendron flexuosum</i>	P
<i>Lachenalia purpureo-caerulea</i>	B	<i>Leucadendron floridum</i>	P
<i>Lachenalia pustulata</i>	B	<i>Leucadendron foedum</i>	P
<i>Lachenalia reflexa</i>	B	<i>Leucadendron galpinii</i>	P
<i>Lachenalia rosea</i>	B	<i>Leucadendron gandogerii</i>	P
<i>Lachenalia splendida</i>	B	<i>Leucadendron lanigerum</i> var. <i>laevigatum</i>	P
<i>Lachenalia trichophylla</i>	B	<i>Leucadendron laureolum</i>	P
<i>Lachenalia unicolor</i>	B	<i>Leucadendron laxum</i>	P
<i>Lachenalia variegata</i>	B	<i>Leucadendron levisanus</i>	P
<i>Lachenalia violacea</i>	B	<i>Leucadendron linifolium</i>	P
<i>Lachenalia viridiflora</i>	B	<i>Leucadendron loeriense</i>	P
<i>Lampranthus amoenus</i>	SC	<i>Leucadendron loranthifolium</i>	P
<i>Lampranthus aureus</i>	SC	<i>Leucadendron macowanii</i>	P
<i>Lampranthus bicolor</i>	SC	<i>Leucadendron meridianum</i>	P
<i>Lampranthus blandus</i>	SC	<i>Leucadendron microcephalum</i>	P
<i>Lampranthus caulescens</i>	SC	<i>Leucadendron modestum</i>	P
<i>Lampranthus compressus</i>	SC	<i>Leucadendron muirii</i>	P
<i>Lampranthus copiosus</i>	SC	<i>Leucadendron nervosum</i>	P
<i>Lampranthus curvifolius</i>	SC	<i>Leucadendron nobile</i>	P
<i>Lampranthus deltoides</i>	SC	<i>Leucadendron platyspermum</i>	P
<i>Lampranthus explanatus</i>	SC	<i>Leucadendron pondoense</i>	P
<i>Lampranthus multiradiatus</i>	SC	<i>Leucadendron procerum</i>	P
<i>Lampranthus piquetbergensis</i>	SC	<i>Leucadendron roodii</i>	P
<i>Lampranthus primiversus</i>	SC	<i>Leucadendron rubrum</i>	P
<i>Lampranthus roseus</i>	SC	<i>Leucadendron salicifolium</i>	P
<i>Lampranthus sociorum</i>	SC	<i>Leucadendron salignum</i>	P
<i>Lampranthus spectabilis</i>	SC	<i>Leucadendron sessile</i>	P
<i>Lampranthus tegens</i>	SC	<i>Leucadendron spissifolium</i>	P
<i>Lapeirousia anceps</i>	B	<i>Leucadendron spissifolium</i> subsp. <i>fragrans</i>	P
<i>Lapeirousia azurea</i>	B	<i>Leucadendron spissifolium</i> subsp. <i>natalense</i>	P
<i>Lapeirousia jacquinii</i>	B	<i>Leucadendron spissifolium</i> subsp. <i>phillipsii</i>	P
<i>Lapidaria margaretae</i>	SC	<i>Leucadendron spissifolium</i> subsp. <i>spissifolium</i>	P
<i>Lasiospermum bipinnatum</i>	HP	<i>Leucadendron stellare</i>	P
<i>Ledebouria socialis</i>	B	<i>Leucadendron stelligerum</i>	P
<i>Leonotis leonurus</i>	HP	<i>Leucadendron strobilinum</i>	P
<i>Leonotis leonurus</i> 'White Lion'	HP	<i>Leucadendron teretifolium</i>	P

Leucadendron thymifolium	P	Linum africanum	HP
Leucadendron tinctum	P	Lithops aucampiae	SC
Leucadendron uliginosum	P	Lithops bromfieldii	SC
Leucadendron uliginosum subsp. uliginosum	P	Lithops dinteri	SC
Leucadendron xanthoconus	P	Lithops divergens	SC
Leucosidea sericea	S	Lithops francisci	SC
Leucospermum 'Ballerina'	P	Lithops fulviceps	SC
Leucospermum 'Caroline'	P	Lithops gesinae	SC
Leucospermum 'Highgold'	P	Lithops geyeri	SC
Leucospermum 'Scarlet Ribbon'	P	Lithops gracilidelineata subsp. gracilidelineata	SC
Leucospermum 'Spider'	P	Lithops hallii	SC
Leucospermum 'Starlight'	P	Lithops helmutii	SC
Leucospermum 'Sunrise'	P	Lithops herrei	SC
Leucospermum 'Tango'	P	Lithops hookeri	SC
Leucospermum bolusii	P	Lithops julii	SC
Leucospermum conocarpodendron	P	Lithops karasmontana	SC
Leucospermum conocarpodendron subsp. P conocarpodendron		Lithops lesliei	SC
Leucospermum cordifolium	P	Lithops marmorata	SC
Leucospermum cordifolium 'Fire dance'	P	Lithops meyeri	SC
Leucospermum cordifolium 'Flamespike'	P	Lithops naureniae	SC
Leucospermum cordifolium 'Vlam'	P	Lithops olivacea var. olivacea	SC
Leucospermum cordifolium 'Yellow Bird'	P	Lithops optica	SC
Leucospermum cordifolium x L. tottum	P	Lithops optica 'Rubra'	SC
Leucospermum cuneiforme	P	Lithops otzeniana	SC
Leucospermum erubescens	P	Lithops pseudotruncatella	SC
Leucospermum formosum	P	Lithops ruschiorum var. ruschiorum	SC
Leucospermum fulgens	P	Lithops salicola	SC
Leucospermum glabrum	P	Lithops schwantesii	SC
Leucospermum glabrum 'Helderfontein'	P	Lithops terricolor	SC
Leucospermum grandiflorum	P	Lithops verruculosa var. verruculosa	SC
Leucospermum gueinzii	P	Lithops villetii subsp. villetii	SC
Leucospermum heterophyllum	P	Littonia modesta	B
Leucospermum hypophyllocarpodendron	P	Lobelia anceps	HP
Leucospermum lineare	P	Lobelia capillifolia	AQ
Leucospermum muirii	P	Lobelia comosa	HP
Leucospermum mundii	P	Lobelia cuneifolia	HP
Leucospermum oleifolium	P	Lobelia pinifolia	HP
Leucospermum oleifolium x Diastella thymelaoides	P	Lobelia valida	HP
		Lobostemon fruticosus	S
		Lobostemon montanus	S
		Lonchocarpus capassa	T
Leucospermum patersonii x L. cordifolium	P	Loxostylis alata	T
Leucospermum praecox	P	Lycium ferocissimum	S
Leucospermum reflexum	P	Machairophyllum albidum	SC
Leucospermum reflexum var. luteum	P	Machairophyllum stayneri	SC
Leucospermum saxatile	P	Mackaya bella	S
Leucospermum tottum	P	Macrothelypteris torresiana	F
Leucospermum tottum x gueinzii	P	Maesa alnifolia	T
Leucospermum truncatulum	P	Maesa lanceolata	T
Leucospermum truncatum x L. conocarpoden- dron	P	Manulea altissima	HP
Leucospermum vestitum	P	Marlothistella uniodalensis	SC
Leysera gnaphalodes	HP	Maurocenia frangularia	T
Limonium perigrinum	HP	Maytenus acuminata	T
		Maytenus acuminata 'Silky Showers'	T

Maytenus bachmannii	S	Nebelia laevis	S
Maytenus heterophylla	S	Nemesia fruticans 'Blue'	HP
Maytenus oleoides	T	Nemesia fruticans 'Pink'	HP
Maytenus polyacantha	S	Nemesia fruticans 'White'	HP
Maytenus procumbens	S	Nemesia strumosa	AN
Maytenus undata	T	Nemesia versicolor	AN
Megalstrum lanuginosum	F	Nephrolepis biserrata	F
Melaspheerula ramosa	B	Nerine filifolia	B
Melianthus comosus	S	Nerine masoniorum	B
Melianthus major	S	Nerine sarniensis	B
Melianthus villosus	HP	Nesaea schinzii	S
Mentha longifolia	HP	Nivenia corymbosa	B
Mentha longifolia subsp. capensis	HP	Nuxia congesta	S
Mentha longifolia subsp. polyadena	HP	Nuxia floribunda	T
Mentha longifolia subsp. wissii	HP	Nylandtia spinosa	S
Mesembryanthemum crystallinum	SC	Nymania capensis	S
Metalasia muricata	S	Nymphaea nouchali var. caerulea	AQ
Metalasia muricata 'Silver Shores'	S	Nymphoides indica	AQ
Metarungia longistrobis	S	Ochna natalitia	T
Metrosideros angustifolia	S	Ochna serrulata	S
Microsorium pappei	F	Ocotea bullata	T
Microsorium punctatum	F	Odontophorus angustifolius	SC
Microsorium scolopendrium	F	Odontophorus marlothii	SC
Millettia grandis	T	Odontophorus nanus	SC
Millettia sutherlandii	T	Oedera imbricata	S
Mimetes chrysanthus	P	Oldenburgia grandis	S
Mimetes cucullatus	P	Oldenburgia paradoxa	S
Mimetes fimbrifolius	P	Olea capensis subsp. macrocarpa	T
Mimusops caffra	T	Olea europaea subsp. africana	T
Mimusops obovata	T	Olea exasperata	S
Mimusops zeyheri	T	Olinia emarginata	T
Mitrostigma axillare	T	Olinia ventosa	T
Mitrophyllum clivorum	SC	Oncoba spinosa	S
Monanthotaxis caffra	S	Onixotis triquetra	B
Monopsis lutea	HP	Oophytum nanum	SC
Monopsis unidentata	HP	Oophytum oviforme	SC
Monsonia speciosa	HP	Ophthalmophyllum herrei	SC
Moraea aristata	B	Oplismenus hirtellus	HP
Moraea bipartita	B	Orbea variegata	SC
Moraea fugax	B	Ormocarpum trichocarpum	S
Moraea gigandra	B	Ornithogalum dubium	B
Moraea insolens	B	Ornithogalum longibracteatum	B
Moraea loubseri	B	Ornithogalum suaveolens	B
Moraea macrocarpa	B	Ornithogalum tenuifolium subsp. tenuifolium	B
Moraea neglecta	B	Ornithogalum thyrsoides	B
Moraea neopavonia	B	Orphium frutescens	HP
Moraea spathulata	B	Orthosiphon amabilis	HP
Moraea tripetala	B	Orthosiphon labiatus	HP
Moraea villosa	B	Orthosiphon serratus	HP
Mundulea sericea	S	Osteospermum 'Buttermilk'	HP
Myrica cordifolia	S	Osteospermum 'Giles Gilby'	HP
Myrica quercifolia	S	Osteospermum caulescens	HP
Myrsine africana	S	Osteospermum ecklonis	HP
Nananthus aloides var. aloides	SC	Osteospermum fruticosum	HP

<i>Osteospermum jucundum</i>	HP	<i>Pelargonium radens</i>	PEL
<i>Osteospermum oppositifolium</i>	HP	<i>Pelargonium radens</i> x <i>graveolens</i>	PEL
<i>Otholobium decumbens</i>	HP	<i>Pelargonium radens</i> x <i>vitifolium</i>	PEL
<i>Otholobium fruticans</i>	S	<i>Pelargonium reniforme</i>	PEL
<i>Otholobium striatum</i>	S	<i>Pelargonium scabrum</i>	PEL
<i>Othonna coronopifolia</i>	S	<i>Pelargonium sicoides</i>	PEL
<i>Oxyanthus latifolius</i>	S	<i>Pelargonium suburbanum</i> subsp. <i>suburbanum</i>	
<i>Oxyanthus pyrifomis</i>	S	PEL	
<i>Oxyanthus speciosus</i> subsp. <i>gerrardii</i>	S	<i>Pelargonium tomentosum</i>	PEL
<i>Ozoroa dispar</i>	T	<i>Pelargonium transvaalense</i>	PEL
<i>Papaver aculeatum</i>	AN	<i>Pelargonium tricolor</i>	PEL
<i>Pappea capensis</i>	T	<i>Pelargonium zonale</i>	PEL
<i>Paranomus reflexus</i>	P	<i>Peltophorum africanum</i>	T
<i>Parkinsonia africana</i>	S	<i>Penaea mucronata</i>	S
<i>Passerina vulgaris</i>	S	<i>Pentzia grandiflora</i>	AN
<i>Pavetta cooperi</i>	S	<i>Pentzia suffruticosa</i>	AN
<i>Pavetta gardeniifolia</i>	S	<i>Peperomia blanda</i>	HP
<i>Pavetta lanceolata</i>	S	<i>Peperomia retusa</i>	HP
<i>Pavetta revoluta</i>	s	<i>Peperomia tetraphylla</i>	HP
<i>Pavetta zeyheri</i>	S	<i>Petopentia natalensis</i>	SC
<i>Pavonia columella</i>	S	<i>Phaenocoma prolifera</i>	S
<i>Pavonia praemosa</i>	S	<i>Phoenix reclinata</i>	T
<i>Peddiea africana</i>	T	<i>Phygellus aequalis</i>	HP
<i>Pelargonium</i> 'Fragrans'	PEL	<i>Phygellus capensis</i>	HP
<i>Pelargonium</i> 'Rose-scented'	PEL	<i>Phylica axillaris</i>	S
<i>Pelargonium abrotanifolium</i>	PEL	<i>Phylica buxifolia</i>	S
<i>Pelargonium alchemilloides</i>	PEL	<i>Phylica ericoides</i>	S
<i>Pelargonium alternans</i>	PEL	<i>Phylica oleaefolia</i>	S
<i>Pelargonium betulinum</i>	PEL	<i>Phylica paniculata</i>	S
<i>Pelargonium caucalifolium</i>	PEL	<i>Phylica pinea</i>	S
<i>Pelargonium citronellum</i>	PEL	<i>Phylica plumosa</i>	S
<i>Pelargonium cordifolium</i>	PEL	<i>Phylica pubescens</i>	S
<i>Pelargonium cordifolium</i> 'Valentine'	PEL	<i>Phylica purpurea</i>	S
<i>Pelargonium cordifolium</i> x <i>ternatum</i>	PEL	<i>Phylica stipularis</i>	S
<i>Pelargonium cotyledonis</i>	PEL	<i>Phyllobolus</i> sp. ( <i>Aridaria</i> sp.)	SC
<i>Pelargonium crispum</i>	PEL	<i>Phymaspermum acerosum</i>	S
<i>Pelargonium cucullatum</i>	PEL	<i>Pittosporum viridiflorum</i>	T
<i>Pelargonium cucullatum</i> subsp. <i>cucullatum</i>	PEL	<i>Pityrogramma calomelanos</i> var. <i>aureoflava</i>	F
<i>Pelargonium cucullatum</i> subsp. <i>tabulare</i>	PEL	<i>Plectranthus ambiguus</i>	PL
<i>Pelargonium denticulatum</i>	PEL	<i>Plectranthus ambiguus</i> 'Manguzuku'	PL
<i>Pelargonium fruticosum</i>	PEL	<i>Plectranthus ambiguus</i> 'Ngoye'	PL
<i>Pelargonium graveolens</i>	PEL	<i>Plectranthus ambiguus</i> 'Thesiger'	PL
<i>Pelargonium greytonense</i>	PEL	<i>Plectranthus ambiguus</i> 'Umgoye'	PL
<i>Pelargonium hirtum</i>	PEL	<i>Plectranthus ciliatus</i>	PL
<i>Pelargonium inquinans</i>	PEL	<i>Plectranthus ciliatus</i> 'Bingham'	PL
<i>Pelargonium ionidiflorum</i>	PEL	<i>Plectranthus ciliatus</i> 'Drege'	PL
<i>Pelargonium myrrhifolium</i>	PEL	<i>Plectranthus ciliatus</i> 'Richard'	PL
<i>Pelargonium odoratissimum</i>	PEL	<i>Plectranthus ecklonii</i>	PL
<i>Pelargonium ovale</i>	PEL	<i>Plectranthus ecklonii</i> 'Erma'	PL
<i>Pelargonium ovale</i> subsp. <i>veronicifolium</i>	PEL	<i>Plectranthus ecklonii</i> 'Medleywood'	PL
<i>Pelargonium panduriforme</i>	PEL	<i>Plectranthus ecklonii</i> 'Msikaba'	PL
<i>Pelargonium peltatum</i>	PEL	<i>Plectranthus ecklonii</i> 'Tall blue'	PL
<i>Pelargonium peltatum</i> 'Worcester'	PEL	<i>Plectranthus ecklonii</i> 'Tommy'	PL
<i>Pelargonium quercifolium</i>	PEL	<i>Plectranthus elegantulus</i>	PL

<i>Plectranthus ernstii</i>	PL	PL	
<i>Plectranthus fruticosus</i>	PL	<i>Plectranthus verticillatus</i> x <i>P. fruticosus</i> PL	
<i>Plectranthus fruticosus</i> 'Behr se trots'	PL	<i>Plectranthus zuluensis</i> 'Devils Knuckles'	PL
<i>Plectranthus fruticosus</i> 'Ellaphie'	PL	<i>Plectranthus zuluensis</i> 'Oribi'	PL
<i>Plectranthus fruticosus</i> 'James'	PL	<i>Plectranthus zuluensis</i> 'Sky'	PL
<i>Plectranthus fruticosus</i> 'Ngoye'	PL	<i>Plectranthus zuluensis</i> 'Umgai'	PL
<i>Plectranthus fruticosus</i> x <i>zuluensis</i> 'Kranskop'	PL	<i>Pleiospilos bolusii</i>	SC
<i>Plectranthus hadiensis</i> var. <i>tomentosus</i>	PL	<i>Pleiospilos compactus</i>	SC
<i>Plectranthus hadiensis</i> var. <i>tomentosus</i> 'Carnegie'	PL	<i>Pleiospilos compactus</i> subsp. <i>canus</i>	SC
<i>Plectranthus hadiensis</i> var. <i>tomentosus</i> PL		<i>Pleiospilos neli</i>	SC
<i>Plectranthus hadiensis</i> var. <i>tomentosus</i> PL		<i>Pleiospilos simulans</i>	SC
<i>Plectranthus hadiensis</i> var. <i>woodii</i>	PL	<i>Pleurostyliia capensis</i>	T
<i>Plectranthus hereroensis</i>	PL	<i>Plumbago auriculata</i>	S
<i>Plectranthus hereroensis</i> 'Witpoortjie'	PL	<i>Podalyria calyprata</i>	S
<i>Plectranthus hilliardiae</i>	PL	<i>Podalyria canescens</i>	S
<i>Plectranthus lucidus</i>	PI	<i>Podalyria sericea</i>	S
<i>Plectranthus madagascariensis</i>	PL	<i>Podocarpus elongatus</i>	T
<i>Plectranthus madagascariensis</i> (variegated)	PL	<i>Podocarpus falcatus</i>	T
<i>Plectranthus madagascariensis</i> var. <i>aliciae</i>	PL	<i>Podocarpus henkelii</i>	T
<i>Plectranthus madagascariensis</i> var. <i>madagascariensis</i>	PL	<i>Podocarpus latifolius</i>	T
<i>Plectranthus madagascariensis</i> var. <i>ramosior</i>	PL	<i>Podranea ricasoliana</i>	C
<i>Plectranthus neochilus</i>	PL	<i>Polygala myrtifolia</i>	S
<i>Plectranthus neochilus</i> 'Siteki'	PL	<i>Polygala virgata</i>	S
<i>Plectranthus oertendahlii</i>	PL	<i>Polystachya pubescens</i>	O
<i>Plectranthus petiolaris</i> 'Geoff'	PL	<i>Polystichum pungens</i>	F
<i>Plectranthus praetermissus</i>	PL	<i>Polystichum</i> sp.	F
<i>Plectranthus purpuratus</i>	PL	<i>Polystichum wilsonii</i>	F
<i>Plectranthus purpuratus</i> 'Umgeni'	PL	<i>Portulacaria afra</i>	SC
<i>Plectranthus rehmannii</i>	PL	<i>Priestleya laevigata</i>	S
<i>Plectranthus saccatus</i> var. <i>longitubus</i>	PL	<i>Protea</i> 'Andrea'	P
<i>Plectranthus saccatus</i> var. <i>longitubus</i> 'King Goodwill'	PL	<i>Protea</i> 'Brenda'	P
<i>Plectranthus saccatus</i> var. <i>longitubus</i> 'Ngoye'	PL	<i>Protea</i> 'Cardinal'	P
<i>Plectranthus saccatus</i> var. <i>longitubus</i> 'Umtamvuma'	PL	<i>Protea</i> 'Embers'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i>	PL	<i>Protea</i> 'Pink ice'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> PL		<i>Protea</i> 'Red Baron'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> 'Kirsten'	PL	<i>Protea</i> 'Riana'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> PL		<i>Protea</i> 'Rita'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> PL		<i>Protea</i> 'Sneyd'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> 'Mtunzini'	PL	<i>Protea</i> 'Susara'	P
<i>Plectranthus saccatus</i> var. <i>saccatus</i> 'Nkandla'	PL	<i>Protea</i> 'Sylvia'	P
<i>Plectranthus spicatus</i>	PL	<i>Protea acuminata</i>	P
<i>Plectranthus spicatus</i> 'Nelspruit'	PL	<i>Protea aristata</i>	P
<i>Plectranthus strigosus</i> 'Albert'	PL	<i>Protea aurea</i> subsp. <i>aurea</i>	P
<i>Plectranthus strigosus</i> 'Bulolwe'	PL	<i>Protea aurea</i> subsp. <i>potbergensis</i>	P
<i>Plectranthus swynnertonii</i>	PL	<i>Protea burchellii</i>	P
<i>Plectranthus verticillatus</i>	PL	<i>Protea caffra</i>	P
<i>Plectranthus verticillatus</i> 'Barberton'	PL	<i>Protea canaliculata</i>	P
<i>Plectranthus verticillatus</i> 'Geelhoutboskloof'	PL	<i>Protea compacta</i>	P
<i>Plectranthus verticillatus</i> 'Marlene'	PL	<i>Protea coronata</i>	P
<i>Plectranthus verticillatus</i> 'Ubombo'	PL	<i>Protea cynaroides</i>	P
<i>Plectranthus verticillatus</i> 'Umbuluzi'	PL	<i>Protea eximia</i>	P
<i>Plectranthus verticillatus</i> x <i>P. fruticosus</i> 'Malelane'		<i>Protea glabra</i>	P
		<i>Protea grandiceps</i>	P
		<i>Protea lacticolor</i>	P

<i>Protea laetans</i>	P	<i>Rhamnus prinoides</i>	S
<i>Protea lanceolata</i>	P	<i>Rhigozum obovatum</i>	S
<i>Protea laurifolia</i>	P	<i>Rhinephyllum macradenium</i>	SC
<i>Protea lepidocarpodendron</i>	P	<i>Rhodocoma arida</i>	R
<i>Protea longifolia</i>	P	<i>Rhodocoma capensis</i>	R
<i>Protea lorifolia</i>	P	<i>Rhodocoma foliosa</i>	R
<i>Protea magnifica</i>	P	<i>Rhodocoma gigantea</i>	R
<i>Protea mundii</i>	P	<i>Rhoicissus digitata</i>	C
<i>Protea nana</i>	P	<i>Rhoicissus rhomboidea</i>	C
<i>Protea nerifolia</i>	P	<i>Rhoicissus tomentosa</i>	C
<i>Protea nitida</i>	P	<i>Rhoicissus tridentata</i>	C
<i>Protea obtusifolia</i>	P	<i>Rhombophyllum dolabriforme</i>	SC
<i>Protea pudens</i>	P	<i>Rhombophyllum rhomboideum</i>	SC
<i>Protea punctata</i>	P	<i>Rhus angustifolia</i>	S
<i>Protea repens</i>	P	<i>Rhus batophylla</i>	S
<i>Protea roupelliae</i>	P	<i>Rhus chirindensis</i>	T
<i>Protea rubropilosa</i>	P	<i>Rhus ciliata</i>	S
<i>Protea scolymocephala</i>	P	<i>Rhus crenata</i>	S
<i>Protea speciosa</i>	P	<i>Rhus dentata</i>	S
<i>Protea subvestita</i>	P	<i>Rhus discolor</i>	S
<i>Protea susannae</i>	P	<i>Rhus erosa</i>	S
<i>Protea venusta</i>	P	<i>Rhus glauca</i>	S
<i>Protea welwitschii</i>	P	<i>Rhus gueinzii</i>	S
<i>Prunus africana</i>	T	<i>Rhus incisa</i> var. <i>effusa</i>	S
<i>Psoralea pinnata</i>	S	<i>Rhus laevigata</i>	S
<i>Psychotria capensis</i>	S	<i>Rhus lancea</i>	T
<i>Pteleopsis myrtifolia</i>	T	<i>Rhus leptodictya</i>	T
<i>Pteris buechananii</i>	F	<i>Rhus lucida</i>	S
<i>Pteris catoptera</i>	F	<i>Rhus nebulosa</i>	S
<i>Pteris cretica</i>	F	<i>Rhus pallens</i>	S
<i>Pteris dentata</i>	F	<i>Rhus pendulina</i>	T
<i>Pterocarpus rotundifolius</i>	T	<i>Rhus pyroides</i>	S
<i>Pterocelastrus tricuspidatus</i>	T	<i>Rhus refracta</i>	S
<i>Pteronia camphorata</i>	S	<i>Rhus tenuinervis</i>	T
<i>Pteronia uncinata</i>	S	<i>Rhus tomentosa</i>	S
<i>Putterlickia pyracantha</i>	S	<i>Rhus transvaalensis</i>	S
<i>Pycnostachys reticulata</i>	HP	<i>Rhus undulata</i>	S
<i>Pycnostachys urticifolia</i>	HP	<i>Rhus zeyheri</i>	S
<i>Quaqua mammillaris</i>	SC	<i>Romulea atrandra</i>	B
<i>Rabdosiella calycina</i>	HP	<i>Romulea flava</i>	B
<i>Rabiea albinota</i>	SC	<i>Romulea monadelpha</i>	B
<i>Rabiea albipuncta</i>	SC	<i>Romulea sabulosa</i>	B
<i>Rabiea difformis</i>	SC	<i>Romulea tabularis</i>	B
<i>Rapanea melanophloeos</i>	T	<i>Rothmannia capensis</i>	T
<i>Raphia australis</i>	T	<i>Rothmannia globosa</i>	T
<i>Rauvolfia caffra</i>	T	<i>Rumohra adiantiformis</i>	F
<i>Restio bifarius</i>	R	<i>Ruschia bijliae</i>	SC
<i>Restio brachiatus</i>	R	<i>Ruschia caroli</i>	SC
<i>Restio festuciformis</i>	R	<i>Ruschia crassa</i>	SC
<i>Restio multiflorus</i>	R	<i>Ruschia evoluta</i>	SC
<i>Restio quadratus</i>	R	<i>Ruschia frutescens</i>	SC
<i>Restio sp.</i>	R	<i>Ruschia gemina</i>	SC
<i>Restio tetragonus</i>	R	<i>Ruschia geminiflora</i>	SC
<i>Restio triticeus</i>	R	<i>Ruschia gracillima</i>	SC

<i>Ruschia indurata</i>	SC	<i>Sclerochiton harveyanus</i>	S
<i>Ruschia lineolata</i>	SC	<i>Scolopia mundi</i>	T
<i>Ruschia macowanii</i>	SC	<i>Scolopia zeyheri</i>	T
<i>Ruschia marianae</i>	SC	<i>Scopologena gracilis</i>	SC
<i>Ruschia maxima</i>	SC	<i>Scopologena vereculata</i>	SC
<i>Ruschia multiflora</i>	SC	<i>Scutia myrtina</i>	S
<i>Ruschia perfoliata</i>	SC	<i>Selaginella kraussiana</i>	F
<i>Ruschia pungens</i>	SC	<i>Selago corymbosa</i>	HP
<i>Ruschia strubeniae</i>	SC	<i>Selago galpinii</i>	HP
<i>Ruspolia hypocrateriformis</i>	S	<i>Selago serrata</i>	HP
<i>Ruttya ovata</i>	S	<i>Selago thunbergii</i>	HP
<i>Ruttyruspolia</i>	S	<i>Senecio abbreviatus</i>	SC
<i>Salix hirsuta</i>	T	<i>Senecio articulatus</i>	SC
<i>Salix mucronata</i>	T	<i>Senecio citrifolius</i>	SC
<i>Salix subserrata</i>	T	<i>Senecio crassulaefolius</i>	SC
<i>Salvia africana-caerulea</i>	S	<i>Senecio elegans</i>	AN
<i>Salvia africana-lutea</i>	S	<i>Senecio ficoides</i>	SC
<i>Salvia chamelaeagnea</i>	S	<i>Senecio glastifolius</i>	HP
<i>Salvia dentata</i>	S	<i>Senecio halimifolius</i>	HP
<i>Salvia disermas</i>	S	<i>Senecio haworthii</i>	SC
<i>Salvia dolomitica</i>	S	<i>Senecio macroglossus</i>	C
<i>Salvia lanceolata</i>	S	<i>Senecio muirii</i>	SC
<i>Salvia muirii</i>	S	<i>Senecio radicans</i>	SC
<i>Salvia repens</i>	S	<i>Senecio rosmarinifolius</i>	S
<i>Salvia rugosa</i> (SYN = <i>S. disermas</i> )	S	<i>Senecio rowleyanus</i>	SC
<i>Salvia runcinata</i>	S	<i>Senecio succulentus</i>	SC
<i>Sansevieria aethiopica</i>	SC	<i>Senecio tamoides</i>	C
<i>Sansevieria hyacinthoides</i>	SC	<i>Senecio tanacetopsis</i>	HP
<i>Sansevieria pearsonii</i>	SC	<i>Senna petersiana</i>	T
<i>Sansevieria trifasciata</i>	SC	<i>Serruria adscendens</i>	P
<i>Sarcostemma viminale</i>	SC	<i>Serruria aemula</i>	P
<i>Satyrion carneum</i>	O	<i>Serruria brownii</i>	P
<i>Scabiosa africana</i>	HP	<i>Serruria cyanoides</i>	P
<i>Scabiosa columbaria</i>	HP	<i>Serruria elongata</i>	P
<i>Scabiosa incisa</i>	HP	<i>Serruria florida</i>	P
<i>Scadoxus multiflorus</i> subsp. <i>katharinae</i>	B	<i>Serruria foeniculacea</i>	P
<i>Scadoxus puniceus</i>	B	<i>Serruria glomerata</i>	P
<i>Sceletium concavum</i>	SC	<i>Serruria pedunculata</i>	P
<i>Schefflera umbellifera</i>	T	<i>Serruria rubricaulis</i>	P
<i>Schizostylis coccinea</i>	B	<i>Sideroxylon inerme</i>	T
<i>Schoenoplectus corymbosus</i>	HP	<i>Silene bellidiodides</i>	HP
<i>Schotia afra</i>	T	<i>Silene undulata</i>	HP
<i>Schotia afra</i> var. <i>afra</i>	T	<i>Simocheilus multiflorus</i>	E
<i>Schotia afra</i> var. <i>angustifolia</i>	T	<i>Sium repandum</i>	HP
<i>Schotia brachypetala</i>	T	<i>Skiatophytum tripolium</i>	SC
<i>Schotia latifolia</i>	T	<i>Sparaxis bulbifera</i>	B
<i>Schrebera alata</i>	T	<i>Sparaxis grandiflora</i>	B
<i>Schwantesia herrei</i>	SC	<i>Sparaxis grandiflora</i> subsp. <i>acutiloba</i>	B
<i>Schwantesia marlothii</i>	SC	<i>Sparaxis tricolor</i>	B
<i>Schwantesia triebneri</i>	SC	<i>Sparaxis variegata</i> var. <i>meterlerkampiae</i>	B
<i>Scilla dracomontana</i> (SYN: <i>S. natalensis</i> )	B	<i>Sparaxis villosa</i>	B
<i>Scilla natalensis</i>	B	<i>Sparrmannia africana</i>	S
<i>Scilla nervosa</i>	B	<i>Sparrmannia ricinocarpa</i>	S
<i>Sclerocarya birrea</i> subsp. <i>caffra</i>	T	<i>Spatalla incurva</i>	P

<i>Spathodea campanulata</i>	T	<i>Syncarpha argyropsis</i>	HP
<i>Spiloxene canaliculata</i>	B	<i>Syncarpha paniculata</i>	HP
<i>Staberoha vaginata</i>	R	<i>Syncarpha speciosissima</i>	HP
<i>Stachys linearis</i>	HP	<i>Syncarpha vestita</i>	HP
<i>Stangeria eriopus</i>	CY	<i>Syncolostemon 'Tyrian Purple'</i>	S
<i>Stapelia gigantea</i>	SC	<i>Syncolostemon eriocephalus</i>	HP
<i>Steganotaenia araliacea</i>	T	<i>Syncolostemon macranthus</i>	HP
<i>Steirodiscus tagetes</i>	AN	<i>Syncolostemon rotundifolius</i>	HP
<i>Stenochlaena tenuifolia</i>	F	<i>Syncolostemon rotundifolius x densiflorus</i>	S
<i>Stenoglottis longifolia</i>	O	<i>Syzygium cordatum</i>	T
<i>Sterculia alexandri</i>	T	<i>Syzygium gerrardii</i>	T
<i>Sterculia murex</i>	T	<i>Syzygium guineense</i>	T
<i>Stoebe alopecuroides</i>	S	<i>Syzygium pondoense</i>	T
<i>Stoebe muirii</i>	S	<i>Tabernaemontana elegans</i>	T
<i>Stoebe plumosa</i>	S	<i>Tanquana archeri</i>	SC
<i>Stoeberia arborea</i>	SC	<i>Tanquana prismatica</i>	SC
<i>Stoeberia carpii</i>	SC	<i>Tapiphyllum parvifolium</i>	T
<i>Stoeberia littlewoodii</i>	SC	<i>Tarchonanthus camphoratus</i>	T
<i>Stomatium mustellinum</i>	SC	<i>Tarchonanthus trilobus</i>	T
<i>Strelitzia alba</i>	T	<i>Tecomaria capensis</i>	S
<i>Strelitzia caudata</i>	T	<i>Tecomaria capensis subsp. nyassae</i>	S
<i>Strelitzia juncea</i>	S	<i>Tectaria gemmifera</i>	F
<i>Strelitzia nicolai</i>	T	<i>Tephrosia grandiflora</i>	S
<i>Strelitzia reginae</i>	S	<i>Terminalia phanerophlebia</i>	T
<i>Strelitzia reginae 'Mandela's Gold'</i>	S	<i>Terminalia sericea</i>	T
<i>Streptocarpus candidus</i>	HP	<i>Tetradenia riparia 'Elize'</i>	HP
<i>Streptocarpus cyaneus</i>	HP	<i>Thaminophyllum latifolium</i>	HP
<i>Streptocarpus fasciatus</i>	HP	<i>Thamnochartus acuminatus</i>	R
<i>Streptocarpus formosus</i>	HP	<i>Thamnochartus cinereus</i>	R
<i>Streptocarpus gardenii</i>	HP	<i>Thamnochartus fruticosus</i>	r
<i>Streptocarpus hilsenbergii</i>	HP	<i>Thamnochartus insignis</i>	R
<i>Streptocarpus johannis</i>	HP	<i>Thamnochartus lucens</i>	R
<i>Streptocarpus polyanthus</i>	HP	<i>Thamnochartus pellucidus</i>	R
<i>Streptocarpus polyanthus</i> HP		<i>Thamnochartus punctatus</i>	R
<i>subsp. comptonii</i>		<i>Thamnochartus spicigerus</i>	R
<i>Streptocarpus primulifolius</i>	HP	<i>Thelypteris dentata</i>	F
<i>Streptocarpus primulifolius subsp. formosus</i>	HP	<i>Thelypteris madagascariensis</i>	F
<i>Streptocarpus primulifolius subsp. primulifolius</i>	HP	<i>Thelypteris spp.</i>	F
<i>Streptocarpus rexii</i>	HP	<i>Thespesia acutiloba</i>	T
<i>Streptocarpus saxorum</i>	HP	<i>Thorncroftia succulenta</i>	SC
<i>Streptocarpus stomandrus</i>	HP	<i>Thunbergia alata</i>	C
<i>Streptocarpus thompsonii</i>	HP	<i>Thunbergia natalensis</i>	HP
<i>Streptocarpus vandeleurii</i>	HP	<i>Tinnea barbata</i>	S
<i>Streptocarpus wendlandii</i>	HP	<i>Titanopsis calcarea</i>	SC
<i>Strophanthus speciosus</i>	S	<i>Titanopsis hugo-schlechteri</i>	SC
<i>Struthiola dodecandra</i>	S	<i>Titanopsis primosii</i>	SC
<i>Strychnos decussata</i>	T	<i>Todea barbara</i>	F
<i>Strychnos madagascariensis</i>	T	<i>Trema orientalis</i>	T
<i>Sutera aurantiaca 'Knysna Hills'</i>	HP	<i>Tricalysia lanceolata</i>	T
<i>Sutera campanulata</i>	HP	<i>Trichilia dregeana</i>	T
<i>Sutera cordata</i>	HP	<i>Trichilia emetica</i>	T
<i>Sutherlandia frutescens</i>	S	<i>Trichocladus crinitus</i>	S
<i>Sympieza labialis</i>	E	<i>Trichodiadema densum</i>	SC
<i>Syncarpha argentea</i>	HP	<i>Trichodiadema mirabile</i>	SC

<i>Trichodiadema stellatum</i>	SC	<i>Watsonia amabilis</i>	B
<i>Tritonia crocata</i>	B	<i>Watsonia angusta</i>	B
<i>Tritonia deusta</i>	B	<i>Watsonia borbonica</i>	B
<i>Tritonia mixed colours</i>	B	<i>Watsonia borbonica</i> subsp. <i>ardernei</i>	B
<i>Tritonia securigera</i>	B	<i>Watsonia borbonica</i> subsp. <i>borbonica</i>	B
<i>Tritonia squalida</i>	B	<i>Watsonia coccinea</i>	B
<i>Tulbaghia capensis</i>	B	<i>Watsonia fourcadei</i>	B
<i>Tulbaghia simmleri</i>	B	<i>Watsonia fulgens</i>	B
<i>Tulbaghia violacea</i>	B	<i>Watsonia humilis</i>	B
<i>Turraea obtusifolia</i>	S	<i>Watsonia hysterantha</i>	B
<i>Tylecodon calaliodes</i>	SC	<i>Watsonia knysnana</i>	B
<i>Tylecodon grandiflorus</i>	SC	<i>Watsonia laccata</i>	B
<i>Tylecodon hirtifolius</i>	SC	<i>Watsonia marginata</i>	B
<i>Tylecodon kritzingeri</i>	SC	<i>Watsonia marginata</i> 'Star Spike'	B
<i>Tylecodon paniculatus</i>	SC	<i>Watsonia meriana</i>	B
<i>Tylecodon racemosus</i>	SC	<i>Watsonia pillansii</i>	B
<i>Tylecodon reticulatus</i>	SC	<i>Watsonia schlechteri</i>	B
<i>Tylecodon rubrovenosus</i>	SC	<i>Watsonia spectabilis</i>	B
<i>Tylecodon schaeferianus</i>	SC	<i>Watsonia stenosphon</i>	B
<i>Tylecodon ventricosus</i>	SC	<i>Watsonia strictiflora</i>	B
<i>Tylecodon wallichii</i>	SC	<i>Watsonia tabularis</i>	B
<i>Urginea epigea</i>	B	<i>Watsonia vanderspuyiae</i>	B
<i>Ursinia abrotanifolia</i>	HP	<i>Watsonia versfeldii</i>	B
<i>Ursinia anthemoides</i>	AN	<i>Watsonia wordsworthiana</i>	B
<i>Ursinia cakilefolia</i>	AN	<i>Widdringtonia cedarbergensis</i>	T
<i>Ursinia calenduliflora</i>	AN	<i>Widdringtonia nodiflora</i>	T
<i>Ursinia dentata</i>	HP	<i>Widdringtonia schwarzii</i>	T
<i>Ursinia nana</i>	AN	<i>Xerophyta retinervis</i>	S
<i>Ursinia paleacea</i>	HP	<i>Xylothea kraussiana</i>	S
<i>Ursinia sericea</i>	HP	<i>Zaluzianskya katharinae</i>	HP
<i>Ursinia speciosa</i>	AN	<i>Zantedeschia aethiopica</i>	B
<i>Vangueria esculenta</i>	T	<i>Zantedeschia aethiopica</i> 'Green Goddess'	B
<i>Vangueria infausta</i>	T	<i>Zantedeschia aethiopica</i> (speckled leaves)	B
<i>Vanheerdea divergens</i>	SC	<i>Zantedeschia albomaculata</i>	B
<i>Veltheimia bracteata</i>	B	<i>Zantedeschia albomaculata</i> 'Helen O'Connor'	B
<i>Vepris lanceolata</i>	T	<i>Zantedeschia jucunda</i>	B
<i>Vernonia mespilifolia</i>	S	<i>Zanthoxylum capense</i>	T
<i>Vernonia myriantha</i>	HP	<i>Ziziphus mucronata</i>	T
<i>Vernonia natalensis</i>	HP	<i>Ziziphus rivularis</i>	T
<i>Vigna vexillata</i>	HP	<i>Zygophyllum foetidum</i>	S
<i>Virgilia divaricata</i>	T		
<i>Virgilia oroboides</i>	T		
<i>Vitellariopsis dispar</i>	T		
<i>Vitellariopsis marginata</i>	T		
<i>Voacanga thouarsii</i>	T		
<i>Wachendorfia brachyandra</i>	B		
<i>Wachendorfia paniculata</i>	B		
<i>Wachendorfia parviflora</i>	B		
<i>Wachendorfia thyrsiflora</i>	B		
<i>Wahlenbergia rivularis</i>	hp		
<i>Wahlenbergia undulata</i>	HP		
<i>Walafrida nitida</i>	HP		
<i>Warburgia salutaris</i>	T		
<i>Watsonia aletroides</i>	B		

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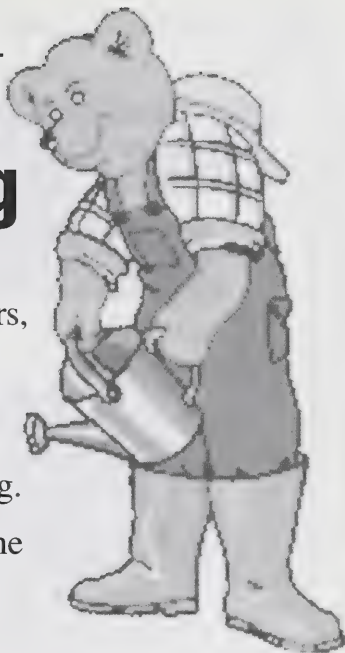


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Main picture: The water-wise garden at Kirstenbosch  
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